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BEFORE THE ARIZONA CORPORATION COMMISSION

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AZ CORP COMMISSION  
DOCUMENT CONTROL

IN THE MATTER OF THE APPLICATION OF  
ARIZONA-AMERICAN WATER COMPANY,  
INC., AN ARIZONA CORPORATION, FOR A  
DETERMINATION OF THE CURRENT FAIR  
VALUE OF ITS UTILITY PLANT AND  
PROPERTY AND FOR INCREASES IN ITS  
RATES AND CHARGES BASED THEREON  
FOR UTILITY SERVICE BY ITS SUN CITY  
WEST WATER AND WASTEWATER  
DISTRICTS.

Docket No. WS-01303A-02-0867

IN THE MATTER OF THE APPLICATION OF  
ARIZONA-AMERICAN WATER COMPANY,  
INC., AN ARIZONA CORPORATION, FOR A  
DETERMINATION OF THE CURRENT FAIR  
VALUE OF ITS UTILITY PLANT AND  
PROPERTY AND FOR INCREASES IN ITS  
RATES AND CHARGES BASED THEREON  
FOR UTILITY SERVICE BY ITS SUN CITY  
WATER AND WASTEWATER DISTRICTS.

Docket No. WS-01303A-02-0868

IN THE MATTER OF THE APPLICATION OF  
ARIZONA-AMERICAN WATER COMPANY,  
INC., AN ARIZONA CORPORATION, FOR A  
DETERMINATION OF THE CURRENT FAIR  
VALUE OF ITS UTILITY PLANT AND  
PROPERTY AND FOR INCREASES IN ITS  
RATES AND CHARGES BASED THEREON  
FOR UTILITY SERVICE BY ITS MOHAVE  
WATER DISTRICT AND ITS HAVASU WATER  
DISTRICT.

Docket No. W-01303A-02-0869

**NOTICE OF FILING  
SURREBUTTAL TESTIMONY**

Arizona Corporation Commission  
**DOCKETED**

OCT 31 2003

DOCKETED BY	<i>CH</i>
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1 IN THE MATTER OF THE APPLICATION OF  
2 ARIZONA-AMERICAN WATER COMPANY,  
3 INC., AN ARIZONA CORPORATION, FOR A  
4 DETERMINATION OF THE CURRENT FAIR  
5 VALUE OF ITS UTILITY PLANT AND  
6 PROPERTY AND FOR INCREASES IN ITS  
7 RATES AND CHARGES BASED THEREON  
8 FOR UTILITY SERVICE BY ITS AGUA FRIA  
9 WATER DISTRICT AND ITS ANTHEM / AGUA  
10 FRIA WASTEWATER DISTRICT.

Docket No. WS-01303A-02-0870


6 IN THE MATTER OF THE APPLICATION OF  
7 ARIZONA-AMERICAN WATER COMPANY,  
8 INC., AN ARIZONA CORPORATION, FOR A  
9 DETERMINATION OF THE CURRENT FAIR  
10 VALUE OF ITS UTILITY PLANT AND  
PROPERTY AND FOR INCREASES IN ITS  
RATES AND CHARGES BASED THEREON  
FOR UTILITY SERVICE BY ITS TUBAC  
WATER DISTRICT.

Docket No. W-01303A-02-0908

11 **NOTICE OF FILING**

12 The Residential Utility Consumer Office ("RUCO") hereby provides notice of filing  
13 the Surrebuttal Testimony of Timothy J. Coley, Marylee Diaz Cortez, Rodney L. Moore and  
14 William A. Rigsby in the above-referenced matters.

15 RESPECTFULLY SUBMITTED this 31<sup>st</sup> day of October, 2003.

16  
17   
18 Daniel W. Pozefsky  
19 Attorney  
20  
21  
22  
23  
24

1 AN ORIGINAL AND TWENTY-ONE COPIES  
2 of the foregoing filed this 31<sup>st</sup> day  
3 of October, 2003 with:

4 Docket Control  
5 Arizona Corporation Commission  
6 1200 West Washington  
7 Phoenix, Arizona 85007

8 COPIES of the foregoing hand-delivered/  
9 mailed this 31<sup>st</sup> day of October, 2003 to:

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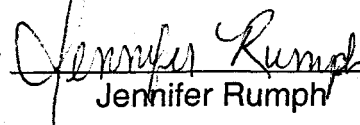
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By

  
Jennifer Rumph

**ARIZONA- AMERICAN WATER COMPANY, INC.**

**DOCKET NOS. WS-01303A-02-0867**

**WS-01303A-02-0868**

**W-01303A-02-0869**

**WS-01303A-02-0870**

**W-01303A-02-0908**

**SURREBUTTAL TESTIMONY**

**OF**

**TIMOTHY J. COLEY**

**ON BEHALF OF**

**THE**

**RESIDENTIAL UTILITY CONSUMER OFFICE**

**OCTOBER 31, 2003**

**INTRODUCTION**

Q. Please state your name, occupation, and business address.

A. My name is Timothy J. Coley. I am a Public Utilities Analyst V employed by the Residential Utility Consumer Office ("RUCO") located at 1110 W. Washington, Suite 220, Phoenix, Arizona 85007.

Q. Have you previously submitted direct testimony in the instant case?

A. Yes, I filed direct testimony on September 5, 2003.

Q. Please state the purpose of your surrebuttal testimony.

A. The purpose of my testimony is to respond to Arizona-American Water Company's ("AZ-AM" or "Company") rebuttal testimony regarding the property tax calculation, which is mandated by the Arizona Department of Revenue (ADOR). I will also discuss revisions I made to the accumulated depreciation balances in the Mohave and Havasu water districts and revisions to my recommended level of AZ-AM payroll expense. These revisions have a slight affect (increase) to the revenue requirement for the two districts.

1 **Property Taxes**

2 Q. Do you agree with the Company's rebuttal comments regarding property  
3 taxes?

4 A. No. The ADOR property tax formula clearly states "The value of all water  
5 and sewer utility companies, for property tax purposes, will be computed  
6 by multiplying the average of the three previous years of reported gross  
7 revenues of the company by a factor of two (2)." AZ-AM has failed to  
8 utilize the three-previous/historical years in its calculation for property  
9 taxes in all ten water and sewer districts in this rate filing. Instead, the  
10 Company uses the adjusted test-year (2002) twice and its proposed level  
11 of revenues year (2004) once rather than the years 1999, 2000, and 2001  
12 that is authorized by ADOR.

13  
14 Q. Is there an authority and/or publication that supports your position on the  
15 "three previous years" of gross revenues when computing property taxes  
16 for water and sewer utility companies?

17 A. Yes. Both an authority and document clearly specify the historical nature  
18 of the previous years gross revenues when calculating property taxes.

19  
20 Q. Please identify the authority and document that exists in support of your  
21 position.

22 A. The authority is the Arizona Department of Revenue. The document that  
23 supports my position is also from ADOR and is attached as Exhibit 1.

**Accumulated Depreciation**

Q. Have you made any revisions to your test year accumulated depreciation balances?

A. Yes. In reviewing my test year plant and accumulated depreciation balances (Rate Base Adjustment #1, Schedule TJC-4), I identified an error in my formulas for accumulated depreciation. I have corrected this error, which impacted my recommended rate base as follows:

	Rate Base	Rate Base
	<u>Direct Filing</u>	<u>Revised</u>
Mohave	\$ 7,531,475	\$ 8,120,368
Havasu	766,406	794,180

Q. Have you made any other revisions to your direct filing?

A. Yes. I have revised my recommended Operating Adjustment #4 for Arizona American's Salary & Wages. The revised calculations are shown on Rebuttal Schedule TJC-10 and are discussed in RUCO witness Rodney Moore's testimony. I have also reflected the revenue requirement impact of Mr. Rigsby's revisions to his cost of capital recommendation.

1 Q. Have you prepared a schedule showing the revised revenue requirement  
2 recommendation resulting from these three revisions?

3 A. Yes. My revised revenue requirements for Mohave and Havasu are  
4 presented on Rebuttal Schedule TJC-1.

5

6 Q. Does this conclude your surrebuttal testimony?

7 A. Yes.





# EXHIBIT 1



**ARIZONA DEPARTMENT OF REVENUE  
PROPERTY TAX DIVISION**

1600 West Monroe, Room 820, Phoenix, Arizona 85007

Telephone: (602) 542-3529

Facsimile: (602) 542-5667

JANE DEE HULL  
GOVERNOR

MARK W. KILLIAN  
DIRECTOR

January 3, 2001

To: Arizona Water and Sewer Utility Companies

From: Cheryl Murray-Leyba, Administrator, Valuation Section

Re: Modification of Valuation Formula

Gentlemen:

After careful study and consideration, the Arizona Department of Revenue and the Water Utilities Association of Arizona have reached an agreement on a change in the valuation formula for water and sewer utility companies for property tax purposes. The goal of the Department and the Association was to arrive at a valuation formula that would: (1) produce predictable values; (2) be easy to administer; (3) be easy to report; (4) produce logical results; (5) be non-controversial; and, (6) produce a minimum tax impact from the previous year. It is our joint opinion that these goals have been met by this new formula. Further, it is hoped that this new valuation methodology will assist your company in your future dealings with the Arizona Corporation Commission regarding projections of future property tax expense.

The Department using the following formula, will value all water and sewer companies in Arizona beginning with the valuation for Tax Year 2002 (Valuation year as of January 1, 2001):

- The value of all water and sewer utility companies, for property tax purposes, will be computed by multiplying the average of the three previous years of reported gross revenues of the company by a factor of two (2).
- If the taxpayer reports less than three (3) years gross income, but reports income for the previous calendar year, the average gross revenue will be calculated based on the average of those years with reported revenues.
- If the taxpayer fails to report gross revenue or any other information required to calculate the value, the taxpayer will be notified of the incomplete filing and will be subject to late filing fees. The Department will then estimate the value of the property.

January 3, 2001

- Construction Work in Progress will be valued at ten percent (10%) of cost as of December 31 of the most recent calendar year.
- The net book cost of licensed vehicles will be deducted from the value indicated by the gross revenues.
- To accurately assess ongoing business operations, and to achieve comparability, further adjustments may be necessary.

Your company's tax liability, as a percentage of gross revenues, produced by this new valuation formula can be estimated as follows:

Valuation Factor	2
Times Assessment Ratio	<u>25%</u>
	.50
Times Tax Rate*	<u>.1000</u> (e.g.)
Estimated % Tax Liability	5.00%

\*Total Primary and Secondary tax rates for taxing district(s) in which property is located.

The estimated tax liabilities should range somewhere between 2.5% and 8.5% of gross revenues in most instances, depending on the tax rates for the area in which company is located.

This change in valuation methodology will be reflected in the annual Property Tax Form, which will be mailed to you by the middle of January 2001. We look forward with working with you on this modification of the valuation formula. If you have any questions regarding this change, and how it may affect your company, please contact Bob Williams or Carole O'Brien of our section at (602) 542-3529.



SURREBUTAL REVENUE REQUIREMENT										
LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
		PER COMPANY FCND	ADJUSTMENTS TO RESTATE TO ORIGINAL COST	PER COMPANY ORIGINAL COST	DIRECT RUCCO ORIGINAL COST	NO. 1	NO. 2	NO. 3	NO. 4	SURREBUTAL RUCCO OCRBB AS ADJUSTED
1	Fair Value Rate Base	\$ 15,212,896	\$ 493,771	\$ 15,706,667	\$ 7,531,475	\$ 588,893	\$ -	N/A	\$ -	\$ 8,120,368
2	Adjusted Operating Income (Loss)	\$ 796,077		\$ 796,077	\$ 972,325	2,386	(11,278)	N/A	15,058	\$ 978,491
3	Current Rate Of Return (L2 / L1)	5.23%		5.07%	12.91%			N/A		12.05%
4	Required Operating Income (L5 X L1)	\$ 1,178,929		\$ 1,217,267	\$ 494,863	\$ 38,690	\$ -	N/A	\$ 16,241	\$ 549,749
5	Required Rate Of Return On Fair Value Rate Base	7.75%		7.75%	6.57%			N/A	0.20%	6.77%
6	Operating Income Deficiency (L4 - L2)	\$ 382,853		\$ 421,190	\$ (477,462)	\$ 36,304	11,278	N/A	\$ 1,183	\$ (428,742)
7	Gross Revenue Conversion Factor (Sch. TJC-1, page 2)	1.6286		1.6286	1.6549	-0.0263		N/A		1.6286
8	Increase In Gross Revenue Requirement (L7 X L6)	\$ 623,527		\$ 685,950	\$ (790,139)	\$ 59,125	\$ 18,367	N/A	\$ 1,926	\$ (698,249)
9	Adjusted Test Year Revenue	\$ 4,394,775		\$ 4,394,775	\$ 4,394,775			N/A		\$ 4,394,775
10	Proposed Annual Revenue (L8 + L9)	\$ 5,018,302		\$ 5,080,725	\$ 3,604,636			N/A		\$ 3,696,526
11	Required Percentage Increase In Revenue (L8 / L9)	14.19%		15.61%	-17.98%			N/A		-15.89%
12	Rate Of Return On Common Equity	11.50%		11.50%	9.11%			N/A	0.50%	9.61%

References:  
Column (A): Company Schedules A-1 and C-1  
Column (B): RUCCO Schedule TJC-2  
Column (C): Recalculated After Adjusting To OCRB  
Column (D): RUCCO Schedules TJC-3 & TJC-6  
Column (E): Adjustment No. 1 - Computation Error In Direct Plant Schedules - See RUCCO Witness Rodney Moore's Surrebuttal Testimony  
Column (F): Adjustment No. 2 - Computation Error In Direct Gross Salaries & Wages - See RUCCO Surrebuttal Schedule TJC-1c  
Column (G): Adjustment No. 3 - Intentionally Left Blank (Applies Only To Sun City Water District)  
Column (H): Adjustment No. 4 - Revised Cost of Capital Figure (See RUCCO Witness William A. Riggsby Surrebuttal Testimony)  
Column (I): Column (D) + Column (E) + Column (F) + Column (G) + Column (H)

**OPERATING INCOME ADJUSTMENT NO. 4  
PROJECTED SALARIES & WAGES**

LINE NO.	COMPANY	AZ-AM BUSINESS UNIT	(A) GROSS PAYROLL	(B) CAPITAL'D PAYROLL	(C) NET PAYROLL	(D) EMP. COUNT	(E) PAYROLL TAX
1	Mohave Water	2371	\$ 651,510	\$ 175,908	\$ 475,602	15	\$ 40,059
2	Havasu Water	2373	144,850	39,110	105,741	3	8,824

	COMPANY	RUCO AS ADJT'D	SURREBUTTA L ADJUSTMT	RUCO DIRECT ADJUSTMT	RUCO INCREMENTAL ADJUSTMT
3	MOHAVE WATER Salaries & Wages	\$ 573,696	\$ 475,602	\$ (98,094)	\$ (115,512)
4	Payroll Tax	47,563	40,059	(7,504)	(8,837)
5	TOTAL	\$ 621,259	\$ 515,661	\$ (105,598)	\$ 17,418

References:

Columns (A) & (D): Company Provided Data on AZ-AM 2002 Payroll

Column (B): 27% of Column (A) - Calculated as Representative of Labor Associated with Capital Projects

Column (C): Column (A) minus Column (B)

Column (E): Column (C) X 7.65% (FICA) + \$245 X Column (D) (FUTA & SUTA)

**RATE DESIGN**

LINE NO.	CUSTOMER CLASSIFICATION and/or Meter Size	(A) RUCO PROPOSED RATE DES'N	(B) ANNUALIZED BILL & GAL. COUNT	(C) RUCO PROPOSED REVENUE
<b>MONTHLY MINIMUM USAGE CHARGE:</b>				
1				
2	Residential 5/8 Incht	7.75	145,86C	1,130,41E
3	Residential 1 Incht	13.50	372	5,022
4	Residential 1.5 Incht	22.50	-	0
5	Residential 2 Incht	27.00	108	2,916
6				
7	Residential Multi-Family 5/8 Incht	7.75	1,056	8,184
8	Residential Multi-Family 1 Incht	7.75	456	3,534
9	Residential Multi-Family 1.5 Incht	7.75	36	279
10	Residential Multi-Family 2 Incht	7.75	1,308	10,137
11	Residential Multi-Family 4 Incht	7.75	24	186
12	Residential Multi-Family 6 Incht	7.75	24	186
13				
14	<u>Residential Rio Water</u>			
15	5/8 Incht (a)	6.95	3,276	22,78C
16	1 Incht (a)	11.90	12	143
17	2 Incht (a)	22.00	12	264
18				
19	Commercial 5/8 Incht	7.75	4,608	35,712
20	Commercial 1 Incht	13.50	1,680	22,679
21	Commercial 1.5 Incht	22.50	192	4,320
22	Commercial 2 Incht	27.00	2,016	54,429
23	Commercial 3 Incht	53.00	192	10,17E
24				
25	Commercial Multi-Unit 5/8 Incht	7.75	240	1,860
26	Commercial Multi-Unit 1 Incht	7.75	60	465
27	Commercial Multi-Unit 1.5 Incht	7.75	12	93
28	Commercial Multi-Unit 2 Incht	7.75	24	186
29				
30	Public Authority 5/8 Incht	7.75	324	2,511
31	Public Authority 1 Incht	13.50	96	1,296
32	Public Authority 1.5 Incht	22.50	60	1,350
33	Public Authority 2 Incht	27.00	432	11,66E
34	Public Authority 3 Incht	53.00	12	636
35	Public Authority 4 Incht	80.00	8	640
36	Public Authority 6 Incht	179.0C	12	2,148
37				
38	Private Fire 2 Incht	2.80	132	369
39	Private Fire 4 Incht	5.50	759	4,171
40	Private Fire 6 Incht	8.00	180	1,441
41	Private Fire 8 Incht	10.75	60	645
42	Private Fire 10 Incht	13.50	12	162
43	Private Fire Hydrant	6.90	1,884	12,99C
44				
45	TOTAL ANNUALIZED MONTHLY CUSTOMER COUNT AND BASIC CHARGE		165,539	1,353,98E
46				
47	NO GALLONS INCLUDED OR PROPOSED IN THE MONTHLY MINIMUM USAGE CHARGE			
48				
49	<b>COMMODITY RATES - ALL METERS (Per 1,000 Gallons):</b>			
50				
51	Mohave	\$ 1.26	1,727,834	\$ 2,177,071
52	Rio Water	\$ 1.43	39,406	\$ 56,351
53				
54	TOTAL ANNUALIZED COMMODITY USAGE AND CHARGES		1,767,24C	\$ 2,233,421
55				
56	Miscellaneous Revenue			108,70E
57				
58	<b>TOTAL PROPOSED ANNUALIZED REVENUE</b>			<b>\$ 3,696,114</b>
59				
60	Required Revenue (As Per Schedule TJC-6, Col (E), L4)			3,696,11E
61	Difference			\$ 2

References:

Column (A): TJC-16, Page 2 - Recommended/Proposed Rates  
Column (B): Response To RUCO Data Request No. 1.0:  
Column (C): Columns (A) X (B)



RATE DESIGN - MONTHLY MINIMUM AND COMMODITY CHARGES

LINE NO.	DESCRIPTION	(A) PRESENT RATES	(B) COMPANY PROPOSED	(C) RUCO PROPOSED
MONTHLY MINIMUM USAGE CHARGE:				
1	5/8 X 3/4 - Inch (a)	\$ 8.85	\$ 9.84	\$ 7.75
2	3/4 - Inch	-	-	-
3	1 - Inch	15.00	17.07	13.50
4	1 1/2 - Inch	25.00	28.45	22.50
5	2 - Inch	30.00	34.14	27.00
6	3 - Inch	60.00	68.28	53.00
7	4 - Inch	90.00	102.42	80.00
8	6 - Inch	200.00	227.60	179.00
9	8 - Inch	400.00	455.20	344.50
10	10 - Inch	N/A	787.20	596.00
<u>Residential Rio Water</u>				
11	5/8 X 3/4 Inch (a)	7.75	8.82	6.95
12	1 Inch (a)	7.75	8.82	11.90
13	2 Inch (a)	7.75	8.82	22.00
<u>Private Fire</u>				
14	2 Inch or Smaller (a)	3.00	3.41	2.80
15	4 Inch (a)	6.00	6.83	5.50
16	6 Inch (a)	9.00	10.24	8.00
17	8 Inch (a)	12.00	13.66	10.75
18	10 Inch	15.00	17.07	13.50
19	12 Inch (a)	18.00	20.48	15.50
20	14 Inch (a)	21.00	23.90	18.10
21	20 Inch	30.00	34.14	25.85
22	Per Sprinkler Head (a)	0.51	0.58	0.44
23	Per each Private Fire Hydrant (a)	7.64	8.69	6.55
<u>Gallons in Minimum</u>				
24	All (except Rio Water)	1000	1,000	0
25	Multi-Units based on multiple of 5/8 x 3/4			
26	Rio Water	2000	2,000	0
<u>Tier 1: Gallons up to 999,999,999</u>				
27	All (except Rio Water)	999,999,999	999,999,999.00	999,999,999.00
28	(Multi-Units based on multiple of 5/8 x 3/4)			
29	Rio Water	999,999,999	999,999,999.00	999,999,999.00
COMMODITY RATES - ALL METERS (Per 1,000 Gallons):				
28	All (a)	1.48	1.68	1.26
29	Rio Water (a)	1.75	1.99	1.43

(a) Rounded to nearest whole cent

References:

Columns (A) & (B): Company Schedule H-3, Pages 1 & 2  
Column (C): TJC-16, Page 1

**SURREBUTAL  
REVENUE REQUIREMENT**

LINE NO.	DESCRIPTION	(A) PER COMPANY RCHD		(B) ADJUSTMENTS TO RESTATE TO ORIGINAL COST		(C) PER COMPANY ORIGINAL COST		(D) DIRECT RUCO ORIGINAL COST		(E) NO. 1		(F) SURREBUTAL RUCO - OCRB ADJUSTMENTS		(G) NO. 3		(H) NO. 4		(I) SURREBUTAL RUCO OCR AS ADJUSTED	
1	Fair Value Rate Base	\$	1,369,042	\$	53,501	\$	1,422,543	\$	766,406	\$	1,280	\$	-	N/A		\$	-	\$	767,686
2	Adjusted Operating Income (Loss)	\$	(16,329)			\$	(16,329)	\$	48,406		8	(16,970)	N/A			\$	(6)	\$	31,438
3	Current Rate Of Return (L2 / L1)		-1.19%				-1.15%		6.32%				N/A						4.10%
4	Required Operating Income (L5 X L1)	\$	106,094			\$	110,247	\$	50,357	\$	84	\$	-	N/A		\$	1,535	\$	51,972
5	Required Rate Of Return On Fair Value Rate Base		7.75%				7.75%		6.57%				N/A				0.20%		6.77%
6	Operating Income Deficiency (L4 - L2)	\$	122,424			\$	126,576	\$	1,951	\$	76	\$	16,970	N/A		\$	1,541	\$	20,534
7	Gross Revenue Conversion Factor (Sch. TJC-1, page 2)		1.6286				1.6286		1.2646				N/A						1.2646
8	Increase In Gross Revenue Requirement (L7 X L6)	\$	199,384			\$	206,142	\$	2,467	\$	96	\$	21,460	N/A		\$	1,949	\$	25,968
9	Adjusted Test Year Revenue	\$	440,924			\$	440,924	\$	440,924				N/A					\$	440,924
10	Proposed Annual Revenue (L8 + L9)	\$	640,308			\$	647,066	\$	443,391				N/A					\$	466,892
11	Required Percentage Increase In Revenue (L8 / L9)		45.22%				46.75%		0.56%				N/A						5.89%
12	Rate Of Return On Common Equity		11.50%				11.50%		9.11%				N/A						9.61%

References:  
Column (A): Company Schedules A-1 and C-1  
Column (B): RUCO Schedule TJC-2  
Column (C): Recalculated After Adjusting To OCRB  
Column (D): RUCO Schedules TJC-3 & TJC-6  
Column (E): Adjustment No. 1 - Computation Error In Direct Plant Schedules - See RUCO Witness Rodney Moore's Surrebuttal Testimony  
Column (F): Adjustment No. 2 - Computation Error In Direct Gross Salaries & Wages - See RUCO Surrebuttal Schedule TJC-1C  
Column (G): Adjustment No. 3 - Intentionally Left Blank (Applies Only To Sun City Water District)  
Column (H): Adjustment No. 4 - Revised Cost of Capital Figure (See RUCO Witness William A. Rigby Surrebuttal Testimony)  
Column (I): Column (D) + Column (E) + Column (F) + Column (G) + Column (H)

**OPERATING INCOME ADJUSTMENT NO. 4  
PROJECTED SALARIES & WAGES**

LINE NO.	COMPANY	AZ-AM BUSINESS UNIT	(A) GROSS PAYROLL	(B) CAPITAL'D PAYROLL	(C) NET PAYROLL	(D) EMP. COUNT	(E) PAYROLL TAX
1	Mohave Water	2371	\$ 651,510	\$ 175,908	\$ 475,602	15	\$ 40,059
2	Havasu Water	2373	144,850	39,110	105,741	3	8,824

	COMPANY AS FILED	RUCO AS ADJ'TED	SURREBUTTAL ADJUSTM'T	RUCO DIRECT ADJUSTM'T	RUCO INCREMENTAL ADJUSTM'T
3 HAVASU WATER					
Salaries & Wages	\$ 117,341	\$ 105,741	\$ (11,601)	\$ (31,535)	\$ 19,935
4 Payroll Tax	9,712	8,824	(888)	(2,413)	1,525
5 TOTAL	<u>\$ 127,053</u>	<u>\$ 114,565</u>	<u>\$ (12,488)</u>		

**References:**

Columns (A) & (D): Company Provided Data on AZ-AM 2002 Payroll

Column (B): 27% of Column (A) - Calculated as Representative of Labor Associated with Capital Projects

Column (C): Column (A) minus Column (B)

Column (E): Column (C) X 7.65% (FICA) + \$245 X Column (D) (FUTA & SUTA)

**RATE DESIGN - PROOF OF REVENUE CONTD**

LINE NO.	DESCRIPTION	(A) RUCO PROPOSED RATE DES'N	(B) ANNUALIZED BILL & GAL. COUNT	(C) RUCO PROPOSED REVENUE
<b>MONTHLY MINIMUM USAGE CHARGE:</b>				
1	5/8 Inch Residential	\$ 12.00	13,608	\$ 163,296
2	1 Inch Residential	20.75	-	0
3	1.5 Inch Residential	29.50	-	-
4	2 Inch Residential	41.00	-	-
5	3 Inch Residential	55.00	0	0
6	4 Inch Residential	70.50	-	-
7	6 Inch Residential	240.00	0	0
8				
9	5/8 Inch Commercial	12.00	420	5,040
10	1 Inch Commercial	20.75	60	1,245
11	2 Inch Commercial	41.00	24	984
12	3 Inch Commercial	55.00	36	1,980
13	4 Inch Commercial	70.50	12	846
14	6 Inch Commercial	240.00	0	
15				
16	Multi-Family - All Meter Sizes	12.00	108	1,296
17				
18	TOTAL ANNUALIZED MONTHLY CUSTOMER COUNT AND BASIC CHARGE		<u>14,268</u>	<u>\$ 174,687</u>
19				
20	NO GALLONS INCLUDED OR PROPOSED IN THE MONTHLY MINIMUM USAGE CHARGE			
21				
22	<b>COMMODITY RATES - ALL METERS (Per 1,000 Gallons):</b>			
23				
24	Havasu	\$ 1.75	160,957	\$ 281,675
25				
26	TOTAL ANNUALIZED COMMODITY USAGE AND CHARGES		<u>160,957</u>	<u>\$ 281,675</u>
27				
28				
29	Miscellaneous Revenue			10,532
30				
31	<b>TOTAL PROPOSED ANNUALIZED REVENUE</b>			<u><u>\$ 466,894</u></u>
32				
33	Required Revenue (As Per Schedule TJC-6, Col (E), L4)			\$ 466,892
34	Difference			\$ 2

References:  
Column (A): TJC-16, Page 2 - Recommended/Proposed Rates  
Column (B): Response To RUCO Data Request No. 1.04  
Column (C): Columns (A) X (B)

**RATE DESIGN - MONTHLY MINIMUM AND COMMODITY CHARGES**

LINE NO.	DESCRIPTION	(A) PRESENT RATES	(B) COMPANY PROPOSED	(C) RUCO PROPOSED
<b>MONTHLY MINIMUM USAGE CHARGE:</b>				
1	5/8 Inch Residential	\$ 10.00	\$ 14.61	\$ 12.00
2	1 Inch Residential	17.10	24.98	20.75
3	1.5 Inch Residential	24.00	35.06	29.50
4	2 Inch Residential	33.60	49.09	41.00
5	3 Inch Residential	45.60	66.62	55.00
6	4 Inch Residential	57.60	84.15	70.50
7	6 Inch Residential	200.00	292.20	240.00
8	8 Inch Residential	400.00	584.40	430.00
9				
10	5/8 Inch Commercial	10.00	14.61	\$ 12.00
11	1 Inch Commercial	17.10	24.98	20.75
12	2 Inch Commercial	33.60	49.09	41.00
13	3 Inch Commercial	45.60	66.62	55.00
14	4 Inch Commercial	57.60	84.15	70.50
15	6 Inch Commercial	200.00	292.20	240.00
16	8 Inch Commercial	400.00	584.40	430.00
17				
18	Multi-Family - All Meter Sizes	10.00	14.61	12.00
19				
20	<u>Gallons In Minimum</u>			
21	All, except Multi-Unit Properties	1000	1,000	0
22	Multi-Units based on multiple of 5/8 x 3/4			
23				
24	<u>Tier 1: Gallons up to 999,999,999</u>			
25	All, except Multi-Unit Properties	999,999,999	999,999,999.00	999,999,999.00
26	Multi-Units based on multiple of 5/8 x 3/4			
27				
28				
29	<b>COMMODITY RATES - ALL METERS (Per 1,000 Gallons):</b>			
30				
31	Summer Rate	1.42	2.07	1.75
32	Winter Rate	1.31	1.91	1.75
33				
34				
35				
36	References:			
37	Columns (A) & (B): Company Schedule H-3, Pages 1 & 2			
38	Column (C): TJC-16, Page 1			

**ARIZONA- AMERICAN WATER COMPANY, INC.**

**DOCKET NOS. WS-01303A-02-0867**

**WS-01303A-02-0868**

**W-01303A-02-0869**

**WS-01303A-02-0870**

**W-01303A-02-0908**

**SURREBUTTAL TESTIMONY**

**OF**

**MARYLEE DIAZ CORTEZ**

**ON BEHALF OF**

**THE**

**RESIDENTIAL UTILITY CONSUMER OFFICE**

**OCTOBER 31, 2003**

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12

13

**INTRODUCTION**

Q. Please state your name for the record.

A. My name is Marylee Diaz Cortez.

Q. Have you previously filed testimony in this docket?

A. Yes. I filed direct testimony on September 5, 2003.

Q. What is the purpose of your surrebuttal testimony?

A. In my surrebuttal testimony, I will respond to the positions and arguments set forth by the Arizona-American ("AZ-AM" or "Company") witnesses in their rebuttal testimonies. Excepting the correction of a calculation error, I will reaffirm RUCO's recommendations as set forth in my direct testimony.

Q. What areas will you address in your surrebuttal testimony?

A. I will address the following issues in my surrebuttal testimony:

- \* RCND Rate Base
- \* Post-test Year Plant
- \* AZ-AM Payroll Expense
- \* Rate Case Expense
- \* Tolleson Treatment Agreement

RUCO witnesses Timothy Coley and Rodney Moore will address the remaining rate base and operating income issues in their surrebuttal



1 testimonies. William Rigsby will address the cost of capital issues in his  
2 surrebuttal testimony.

3  
4 **RATE BASE**

5 **RCND Rate Base**

6 Q. Please discuss the Company's rebuttal comments regarding its requested  
7 RCND rate base.

8 A. The Company continues to maintain its position that rates in this docket  
9 should be set based on using a RCND rate base as its fair value rate  
10 base. AZ-AM argues in its rebuttal testimony that Arizona law regarding  
11 fair value supports the Company's use of a RCND rate base in this docket.

12  
13 Q. Do you agree that Arizona law requires a finding of fair value and that the  
14 Commission considers RCND in rendering rate decisions?

15 A. Yes. RUCO has no dispute with the Company regarding that issue. The  
16 difference between the Company's position and RUCO's position on this  
17 issue does not hinge on whether Arizona law permits the rate base  
18 consideration of RCND data, but rather, hinges on how the rate of return is  
19 determined when RCND is considered in determining a fair value rate  
20 base.

1 Q. Didn't you discuss this distinction in your direct testimony?

2 A. Yes. I discuss at length on pages 9 through 13 of my direct testimony the  
3 correct manner in which to determine a utility's revenue requirement when  
4 using an Original Cost Rate Base (OCRB), a RCND Rate Base, or a Fair  
5 Value Rate Base (FVRB). I clearly state at page 10 that the Commission  
6 is "required" to look at RCND data when submitted for consideration by  
7 the utility. Thus, the Company's arguments on this issue are  
8 unnecessary, since RUCO does not dispute the requirement to consider  
9 RCND data as part of a determination of fair value.

10  
11 Q. Assuming the Commission were to consider a RCND rate base for  
12 purposes of computing revenue requirements in this docket, has the  
13 Company made the correct calculation?

14 A. No. When the Commission considers RCND in computing a FVRB to set  
15 revenue requirement, it *does not* apply an original cost rate of return to  
16 either the RCND or FVRB, as was proposed by the Company in this  
17 docket.

18  
19 Q. When the Commission considers an RCND rate base as the basis in  
20 ascertaining a FVRB for determining revenue requirement in this case,  
21 what would be the correct method of determining rate of return?

22 A. The correct methodology would be as follows:

23 Assume:

1	OCRB	\$3,000,000
2	OCRB ROR	8%
3	Rev. Req.	240,000
4	RCND RB	4,200,000
5	RCND ROR	5.7% <sup>1</sup>
6	FVRB	3,600,000 <sup>2</sup>
7	FV ROR	6.67% <sup>3</sup>
8	Rev. Req.	240,000

9 The error the Company has made in its utilization of an RCND rate base is  
10 to apply the Original Cost Rate of Return to the RCND rate base thereby  
11 deriving a larger revenue requirement. This is incorrect. When the correct  
12 rate of return is applied to the OCRB, RCND rate base, or the Fair Value  
13 rate base *the revenue requirement remains constant*. The reason the  
14 Company has been able to derive a higher revenue requirement from its  
15 proposed RCND rate base is because it has applied an incorrect rate of  
16 return to that base.

17  
18 Q. Have you attached an exhibit showing how the Commission calculates the  
19 various rates of return utilizing OCRB, RCND, and Fair Value?

20 A. Yes. Attached as Exhibit MDC-A is an ACC decision that clearly shows  
21 how the Commission calculates the various rates of return given the rate

<sup>1</sup> Rev. Req./RCND RB = \$240,000/4,200,000 = 5.7%

<sup>2</sup> FVRB = (OCRB + RCND)/2 = (\$3,000,000 + 4,200,000)/2 = 3,600,000

<sup>3</sup> Rev. Req./RCND RB = \$240,000/3,600,000 = 6.67%

1 base basis utilized. Note that regardless of whether OCRB, RCND, or  
2 Fair Value forms the basis of the calculation, the revenue requirement  
3 remains constant.

4  
5 Q. Are these various rate of return calculations included in every ACC rate  
6 case decision?

7 Q. Yes, when the utility's application presents all three bases (i.e. OCRB,  
8 RCND, and FV) in its rate request. Quite often small utilities, particularly  
9 water and sewer, do not present RCND or Fair Value information, and  
10 thus the Commission determines that the OCRB is the FVRB, and  
11 therefore does not include a calculation of RCND rate of return.

12  
13 Q. What other arguments does the Company present in defense of its  
14 request for a RCND rate base coupled with an OCRB rate of return?

15 A. The Company argues that its rate base/rate of return request does not  
16 "double count" inflation, as represented in my direct testimony.

17  
18 Q. Why does the Company believe there is no double count?

19 A. The Company argues that the Handy Whitman factors used to translate  
20 original cost into "current" cost bear no relation to the inflation factors  
21 embedded in the cost of capital because the Handy Whitman factors are  
22 historical and the cost of capital inflation factors are forward looking and  
23 represent investor forecasts of the future.

1 Q. Does this argument have merit?

2 A. No. The inflation factors that have been embedded in the rates of return  
3 that a utility has been authorized in prior years are historical. The income  
4 that a utility has earned over the years from its authorized rates of return is  
5 a historical amount that the utility has already recovered in compensation  
6 for inflation. The historical earnings that a utility derives from inflation  
7 factors in its rate of return coupled with a rate base that is restated to  
8 current cost clearly results in a double count.

9  
10 Q. Has the Company presented any new evidence in its rebuttal testimony  
11 that would justify using an RCND rate base with an original cost rate of  
12 return in determining revenue requirements in this docket?

13 A. No. The Company has presented no such evidence to support the  
14 determination of revenue requirements based on a RCND rate base with  
15 an original cost rate of return.

16  
17 **Plant in Service**

18 Q. Have you reviewed the Company's rebuttal comments concerning your  
19 recommended level of plant and accumulated depreciation?

20 A. Yes. The Company's rebuttal testimony has very little discussion of  
21 RUCO's recommended plant and accumulated depreciation. The  
22 Company merely claims RUCO's depreciation expense calculation should

1 have made use of a "half month convention" and that RUCO has not  
2 included any post test year plant in its recommendation.

3  
4 Q. Please address these arguments.

5 A. RUCO's depreciation calculations utilize the half year convention for plant  
6 additions and retirements. The half year convention is typically utilized for  
7 ratemaking purposes and absent any extenuating circumstances (of which  
8 the Company has made no indication) is the accepted methodology to  
9 use.

10  
11 The Company's contention that RUCO has not included post test year  
12 plant in its recommended plant figures is simply untrue. RUCO's rate  
13 base adjustment #2, for each system, includes the actual post test plant  
14 figures in rate base. Thus, the Company's arguments regarding RUCO's  
15 plant and accumulated depreciation balances have no merit.

16  
17 **OPERATING INCOME**

18 **AZ-AM Payroll Expense**

19 Q. Please discuss the Company's rebuttal comments regarding your  
20 recommended level of AZ-AM Payroll Expense.

21 A. The Company agrees with RUCO's position that the AZ-AM payroll  
22 adjustment should be based on the actual AZ-AM recorded payroll  
23 expense for 2002 as opposed to the Company's 2002 estimated payroll

1 expense. The Company, however, does not agree with the amounts  
2 RUCO has reflected in its adjustment. The Company also argues with  
3 RUCO's use of a Company-wide capitalization rate, and believes the  
4 actual amount of payroll expense that was capitalized during 2002 for  
5 each individual system should be utilized in the payroll calculation.

6  
7 Q. Please respond.

8 A. Upon review of the AZ-AM payroll data base that the Company provided  
9 to RUCO, it appears that through the process of sorting the data by  
10 individual system that some of the payroll did not get accounted for.  
11 RUCO subsequently has resorted the data so that all payroll is accounted  
12 for. Surrebuttal Schedule MDC-10, shows the revised AZ-AM payroll  
13 adjustment for the Anthem Water, Anthem Wastewater, and Agua Fria  
14 Water systems.

15  
16 Q. Have you also made revisions to your payroll capitalization factor?

17 A. No. I do not agree that the actual 2002 capitalization factors for each  
18 individual system is appropriate for setting a level on a going forward  
19 basis.

20  
21 Q. Why not?

22 A. The proportion of salaries and wages that are capitalized by an individual  
23 utility system can vary from year to year depending on the capital budget.

1 In some years there may be very little construction, resulting in a low  
2 capitalization factor. In other years, the Company may have a lot of  
3 growth or undertake a large number of improvement projects, resulting in  
4 a higher capitalization factor. Thus, it is desirable when setting rates to  
5 reflect an average capitalization factor in order to capture the year to year  
6 ebb and flow of construction projects.

7  
8 **Rate Case Expense**

9 Q. Please discuss the Company's rebuttal comments regarding your  
10 recommended level of rate case expense.

11 A. The Company argues that my recommended level of rate case expense is  
12 too low.

13  
14 Q. What was the basis of your recommended level of rate case expense?

15 A. I compared the level of rate case expense requested by the Company to  
16 ACC authorized rate case expenses for similarly situated utilities. In an  
17 effort to be conservative, I accepted the highest level of rate case expense  
18 allowed from my group of similarly situated utilities and grossed that  
19 amount up by the Consumer Price Index in order to put that amount in  
20 today's dollars. The result was a recommended level of rate case of  
21 \$418,941 compared with the Company's request for \$706,000.



1 Q. What arguments does the Company present in support of its request?

2 A. The Company presents two principle arguments. First, AZ-AM claims that  
3 there were only six systems involved in the rate case that I used as a base  
4 line for setting rate case expense, whereas in the instant case there are  
5 ten systems. Second, the Company argues that my recommended base  
6 line level of rate case expense at the time it was set translated to a cost of  
7 \$13.25 per customer, whereas the Company proposed level in the instant  
8 case would result in a cost of \$7.39 per customer.

9  
10 Q. Please respond to these arguments.

11 A. The Company's first argument would only have merit if there were a direct  
12 correlation between number of systems and rate case expense, which  
13 there is not. The number of systems may have some incremental impact  
14 on the amount of schedule preparation time or even possibly some other  
15 increment, however rate case expense is driven primarily by the number  
16 of issues in a given case, the number of experts retained, the rates  
17 charged by experts and attorneys, and number of hours the Company is  
18 willing to retain experts and attorneys for.

19  
20 The Company's second argument is flawed for the same reason; the level  
21 of rate case expense incurred is not related to and/or directly dependent  
22 on the number of customers. Number of customers in and of itself will not

1           complicate the issues, not require retention of extra consultants, increase  
2           attorney's rates, nor prolong the hearing.

3  
4   Q.    Are you aware of any other Arizona water or sewer companies that have  
5           been authorized a level of rate case expense that exceeds \$700,000?

6   A.    No. To my knowledge, such an amount is unprecedented. Recently,  
7           Arizona Water conducted a rate case that was comparable to AZ-AM's  
8           current case. Arizona Water initially requested \$257,550<sup>4</sup> in rate case  
9           expense, approximately 40% of what AZ-AM is requesting in this case.

10  
11   Q.   What impact would such a large level of rate case expense have on the  
12           individual AZ-AM water systems?

13   A.    Rate case expense of the magnitude requested by the Company has the  
14           effect of creating the need for a rate increase. According to RUCO's and  
15           Staff's analysis of the AZ-AM water and sewer systems, several of these  
16           systems require a rate *decrease* and in all other instances the required  
17           increase is far less than portrayed by the Company. Thus, allowance of  
18           almost three quarters of a million in rate case expense, in and by itself  
19           could create the need for a rate increase, certainly a counter productive  
20           outcome, and a precedent this Commission should not establish.

21  

---

<sup>4</sup> Arizona Water has since modified its initial request to a level that is still 50% less than AZ-AM's  
rate case expense request. As yet, a decision has not been issued in the Arizona Water case.

1 Q. Simply because a Company actually incurs a certain level of rate case  
2 expense should that amount, no questions asked, be included in rates?

3 A. No. Like any expense, mere incurrence of a cost does not mean the  
4 expenditure was necessary, prudent, or provided a benefit to ratepayers.  
5 Carte blanche recognition of rate case expenditures in future rates creates  
6 an environment that will reward a company for excessive or imprudent  
7 levels of rate case expense.

8  
9 Q. Can you provide an example of rate case expenditures in this proceeding  
10 that may not have been necessary, prudent, and/or beneficial?

11 A. Yes. In response to a data request<sup>5</sup> the Company provided copies of its  
12 actual rate case invoice billings. In reviewing these rate case charges, I  
13 noted a number of expenditures that were questionable in terms of  
14 necessity, reasonableness, prudence, and benefits.

15  
16 Q. Please discuss these expenditures?

17 A. The Company's accounting consultants billed over \$8,000, subsequent to  
18 filing its rate application. These charges were for time spent correcting the  
19 originally filed bill counts, and thus, were remedial in nature. Certainly,  
20 remedial expenses incurred to meet sufficiency standards should not  
21 reasonably be recovered from ratepayers.

22  

---

<sup>5</sup> Staff data request All 21-6.

1 The Company's accounting consultants billed over \$40,000 for work  
2 related to a "cost of service study". These charges were incurred between  
3 April 2002 (prior to AZ\_AM filing its application) and February 2003  
4 (shortly after the finding of sufficiency). The Company, however, did not  
5 file this study, nor rely on it in any manner to support its application.

6  
7 As of May 2003, the Company had been billed over \$200,000 in legal  
8 fees. These billings were all incurred prior to Staff and Intervenor  
9 testimony, and certainly prior to hearings. These charges are applicable  
10 to two attorneys; one at \$300 an hour and the other at \$260 an hour.  
11 Considering this \$200,000 has accrued prior to any litigated hearings or  
12 briefs, the reasonableness and the prudence of the expenditures is  
13 questionable.

14  
15 **COST OF CAPITAL**

16 Q. In response to the Company's rebuttal testimony, is RUCO proposing any  
17 revision to the cost of capital recommended in its direct testimony?

18 A. Yes. RUCO witness William Rigsby is proposing a minor revision to both  
19 his recommended cost of debt and cost of equity figures. These revisions  
20 are discussed at length in his surrebuttal testimony and result in a revised  
21 cost of capital figure of 6.77%.

1 **OTHER ISSUES**

2 **Tolleson Agreement**

3 Q. Have your reviewed the Company's rebuttal arguments regarding its  
4 recommended recovery of costs yet to be incurred pursuant to a recent  
5 amendment to the Tolleson Wasterwater Treatment agreement?

6 A. Yes. The Company and the City of Tolleson have amended their  
7 wasterwater treatment agreement in two respects. First, the amendment  
8 increases the replacement and contingency reserve from a monthly  
9 contribution of \$1,500 to \$20,000 a month, with a new cap on the reserve  
10 of \$200,000. Second, the amendment calls for additional capital  
11 contributions to fund an estimated \$10 million in plant improvements by  
12 2008. The Company claims these new costs are known and measurable,  
13 beyond the control of the Company, significant in magnitude, and  
14 therefore, should be afforded automatic adjustor mechanism recovery.

15  
16 Q. Didn't the ACC issue a recent decision allowing the Company to account  
17 for these future Tolleson expenditures as deferred amounts, eligible for  
18 consideration of future recovery?

19 A. Yes. The Commission issued Decision No. 66387, on October 6, 2003,  
20 granting the Company deferral accounting treatment for these future  
21 costs. Thus, the Company has authority to accrue these costs and  
22 request recovery of these costs once the expenditures have been made

1 and the plant is in service. Thus, there is no need for an adjustor  
2 mechanism, nor would it be appropriate in this instance.

3  
4 Q. Why not?

5 A. The primary reason for an automatic adjustor mechanism is to prevent  
6 under and over recoveries of actual expenses outside of a rate case that  
7 are volatile in nature and widely fluctuate. The mechanism is not intended  
8 to be used to recover the estimated cost of capital expenditures to be  
9 made in the future. Ratemaking principles generally preclude rate  
10 recognition of future, as yet not made, investment. The appropriate  
11 ratemaking treatment for planned future investment is to request rate  
12 recovery through a rate case once the investment has actually been made  
13 and is actually providing service to customers.

14  
15 Q. Please address the Company's argument that, absent an adjustor,  
16 recovery of the Tolleson investment will require another rate case at some  
17 future date.

18 A. It is normally the case that incremental plant investment will require a rate  
19 case to recognize that investment in rates. Further, Company witness  
20 Stephenson testifies in his rebuttal testimony that the Company's next rate  
21 application will be filed at the first possible opportunity<sup>6</sup>. Since it is the

---

<sup>6</sup> See the Rebuttal Testimony of David Stephenson at page 15, lines 1 through 6.

1 Company's intention to file a rate case prior to January 2006<sup>7</sup> anyway,  
2 there is absolutely no reason to create mechanisms in this case to insure  
3 recovery of costs as far out as 2008. In some instances, the ACC has  
4 recognized post-test year plant additions, however, in such instances the  
5 expenditures have actually been made, the plant actually is in service and  
6 generally within 12 months following the end of test year. In this case, the  
7 plant expenditures have not been made, the plant is not in service, and  
8 completion is estimated to be as far out as 2008.

9  
10 **Surrebuttal Revisions**

11 Q. Have you prepared a schedule showing your revised revenue requirement  
12 recommendations?

13 A. Yes. I have prepared a revised Schedule MDC-1 for Anthem Water,  
14 Anthem Wastewater, and Agua Fria Water showing my surrebuttal  
15 recommendations. The only difference in my direct position for these  
16 systems and my surrebuttal position is a revision as a result of the  
17 previously discussed payroll database glitch and Mr. Rigsby's revision to  
18 his recommended cost of capital. Neither revision has a material impact  
19 on RUCO's revenue requirement recommendations. I have also prepared  
20 a revised Schedule MDC-16 showing my recommended rate design based  
21 on the revised revenue requirements.

22  

---

<sup>7</sup> See the Rebuttal Testimony of David Stephenson at page 15, lines 1 through 6.

1 Q. Does this conclude your surrebuttal testimony?

2 A. Yes.

3

4

5

6

7





ARIZONA AMERICAN - ANTHEM WATER  
TEST YEAR ENDING DECEMBER 31, 2001  
REVENUE REQUIREMENTS

DOCKET NO. W-01303-02-0868  
SURREBUTTAL SCHEDULE MDC-1  
PAGE 1 OF 2

LINE NO.	DESCRIPTION	(A) PER COMPANY RCND	(B) ADJUSTMENTS TO RESTATE TO ORIGINAL COST	(C) PER COMPANY ORIG. COST	(D) RUCO RECOMMENDED	(E) RUCO SURREBUTTAL ADJUSTMENTS	(F) RUCO SURREBUTTAL RECOMMENDED
1	RATE BASE	\$9,837,108	10,377,121	20,214,229	8,766,964	0	8,766,964
2	ADJUSTED OPERATING INCOME	577,577		577,577	836,402	(55,575)	780,827
3	CURRENT RATE OF RETURN	5.87%		2.86%	9.54%	-0.63%	8.91%
4	REQUIRED OPERATING INCOME	762,376		1,566,603	575,990	17,534	593,523
5	REQUIRED RATE OF RETURN	7.75%		7.75%	6.57%	0.20%	6.77%
6	OPERATING INCOME DEFICIENCY	184,799		989,026	(260,412)	73,109	(187,304)
7	REVENUE CONVERSION FACTOR	1.6286		1.6286	1.6287	1.6287	1.6287
8	INCREASE IN REVENUE REQUIREMENT	<u>\$300,963</u>		<u>\$1,610,727</u>	<u>(\$424,126)</u>	<u>\$119,070</u>	<u>(\$305,056)</u>
9	TEST YEAR REVENUE	4,010,805		4,010,805	4,010,805	0	4,010,805
10	PROPOSED REVENUE	4,311,768		5,621,532	3,586,679	119,070	3,705,749
99	PERCENTAGE INCREASE	7.50%		40.16%	-10.57%		-7.61%
12	RETURN ON EQUITY						

REFERENCES

COLUMN (A): COMPANY SCH. A-1  
COLUMN (B): COMPANY SCH. B-1  
COLUMN (C): COMPANY SCH. B-1  
COLUMN (D): SCH. MDC-2, MDC-6 & WAR-1  
COLUMN (E): MDC SURREBUTTAL TEST, SUREBUTTAL SCH. MDC-10  
COLUMN (F): COLUMN (D) + COLUMN (E)

ARIZONA AMERICAN - ANTHEM WATER  
TEST YEAR ENDING DECEMBER 31, 2001  
OPERATING ADJ #4 - PROJECTED AZ-AM SALARIES & WAGES

DOCKET NO. W-01303-02-0868  
SURREBUTTAL SCHEDULE MDC-10

LINE NO.	DESCRIPTION	AMOUNT	REFERENCE
1	ACTUAL AZ-AM PAYROLL	\$460,581	COMPANY SPREADSHEET
2	LESS: CAPITALIZED PAYROLL	<u>124,357</u>	LINE 1 x 27%
3	ACTUAL PAYROLL EXPENSE	336,224	LINE 1 - LINE 2
4	ESTIMATED PAYROLL PER AZ-AM	<u>368,996</u>	CO. SCH. C-2 PG. 5
5	PAYROLL ADJUSTMENT	<u>(\$32,772)</u>	LINE 3 - LINE 4
6	ACTUAL PAYROLL EXPENSE	336,224	LINE 3
7	PAYROLL TAX FACTOR	<u>7.65%</u>	FICA RATE
8	SUBTOTAL	25,721	LINE 6 x LINE 7
9	FUTA & SUTA TAX	<u>2,940</u>	\$245 X 12 EMPLOYEES
10	PAYROLL TAXES	28,661	LINE 8 + LINE 9
11	ESTIMATED PER COMPANY	<u>31,169</u>	CO. SCH. C-2 PG. 5
12	PAYROLL TAX ADJUSTMENT	<u>(\$2,508)</u>	LINE 10 x LINE 11
<u>INCREMENTAL SURREBUTTAL ADJUSTMENT</u>			
<u>PAYROLL</u>			
13	RUCO DIRECT ADJUSTMENT	(116,339)	
14	RUCO SURREBUTTAL ADJUSTMENT	<u>(32,772)</u>	
15	RUCO INCREMENTAL ADJUSTMENT	<u>\$83,567</u>	
<u>PAYROLL TAXES</u>			
16	RUCO DIRECT ADJUSTMENT	(8,901)	
17	RUCO SURREBUTTAL ADJUSTMENT	<u>(2,508)</u>	
18	RUCO INCREMENTAL ADJUSTMENT	<u>\$6,393</u>	

**RATE DESIGN**

LINE NO.	DESCRIPTION	(A) RUCO PROPOSED RATE DES'N	(B) ANNUALIZED CUST. & GAL. COUNT	(C) RUCO PROPOSED REVENUE
	<b>MONTHLY MINIMUM USAGE CHARGE:</b>			
		\$ 12.95		
1	5/8 X 3/4 - Inch	12.95	99	\$ 1,282
2	3/4 - Inch	12.95	19,849	257,045
3	1 - Inch	26.00	15,720	408,720
4	1 1/2 - Inch	52.00	95	4,940
5	2 - Inch	65.00	480	31,200
6	3 - Inch	132.00	72	9,504
7	4 - Inch	164.00	24	3,936
8	6 - Inch	204.00	-	-
9	8 - Inch	1,000.00	-	-
10	<b>Private Fire Protection</b>			
11	3 - Inch	60.00	-	\$ -
12	4 - Inch	74.00	37	\$ 2,738
13	6 - Inch	106.00	144	\$ 15,265
14	8 - Inch	154.00	0	\$ 0
15	10 - Inch	308.00	-	\$ -
16	<b>TOTAL ANNUALIZED MONTHLY CUSTOMER COUNT AND BASIC CHARGE</b>		<u>36,520</u>	<u>\$ 734,629</u>
17	<b>NO GALLONS INCLUDED OR PROPOSED IN THE MONTHLY MINIMUM USAGE CHARGE</b>			
18	<b>COMMODITY RATES - ALL METERS (Per 1,000 Gallons):</b>			
19	All Gallonage (excluding Wholesale)	1.78	408,198,000	\$ 726,592
20	Wholesale	1.88	35,826,000	67,353
			0	0
			0	0
21	<b>TOTAL ANNUALIZED COMMODITY USAGE AND CHARGES</b>		<u>444,024,000</u>	<u>\$ 793,945</u>
22	Treatco Revenues			226,872
23	Other Revenue			1,950,387
24	<b>TOTAL PROPOSED ANNUALIZED REVENUE</b>			<u>\$ 3,705,834</u>
25	Required Revenue (per Schedule MDC-6)			3,705,749
26	Difference			<u>\$ 85</u>

ARIZONA AMERICAN WATER COMPANY - ANTHEM WATER  
 Test Year Ended December 31, 2001  
 RATE DESIGN

Surrebuttal Schedule MDC-16  
 Page 2 of 2

**RATE DESIGN - MONTHLY MINIMUM AND COMMODITY CHARGES**

		(A)	(B)	(C)
LINE NO.	DESCRIPTION	PRESENT RATES	COMPANY PROPOSED	RUCO PROPOSED
	MONTHLY MINIMUM USAGE CHARGE:			
	Residential Commercial			
1	5/8 X 3/4 - Inch	\$ 16.00	18.70	12.95
2	3/4 - Inch	16.00	18.70	12.95
3	1 - Inch	32.00	37.41	26.00
4	1 1/2 - Inch	64.00	74.82	52.00
5	2 - Inch	80.00	93.52	65.00
6	3 - Inch	160.00	187.04	132.00
7	4 - Inch	200.00	233.80	164.00
8	6 - Inch	250.00	292.25	204.00
9	8 - Inch		1,496.00	1,000.00
10	Private Fire Protection			
11	3 - Inch	70.00	81.83	60.00
12	4 - Inch	90.00	105.21	74.00
13	6 - Inch	135.00	157.82	106.00
14	8 - Inch	180.00	210.42	154.00
15	10 - Inch	360.00	420.84	308.00

16 NO GALLONS INCLUDED OR PROPOSED IN THE MONTHLY MINIMUM USAGE CHARGE

**COMMODITY RATES - ALL METERS (Per 1,000 Gallons):**

17	Tier 1	\$ 2.00	2.34	1.78
18	Wholesale	2.16	2.16	1.88

ARIZONA AMERICAN - ANTHEM WASTEWATER  
TEST YEAR ENDING DECEMBER 31, 2002  
REVENUE REQUIREMENTS

DOCKET NO. W-01303-02-0868  
SURREBUTTAL SCHEDULE MDC-1  
PAGE 1 OF 2

LINE NO.	DESCRIPTION	(A) PER COMPANY RCND	(B) ADJUSTMENTS TO RESTATE TO ORIGINAL COST	(C) PER COMPANY ORIG. COST	(D) RUCO RECOMMENDED	(E) RUCO SURREBUTTAL ADJUSTMENTS	(F) RUCO SURREBUTTAL RECOMMENDED
1	RATE BASE	\$2,853,742	5,136,214	8,881,868	1,904,897	0	1,904,897
2	ADJUSTED OPERATING INCOME	(48,855)		(48,855)	75,508	(44,250)	31,258
3	CURRENT RATE OF RETURN	-1.71%		-0.55%	3.96%	-2.32%	1.64%
4	REQUIRED OPERATING INCOME	221,165		688,345	121,342	7,620	128,962
5	REQUIRED RATE OF RETURN	7.75%		7.75%	6.37%	0.40%	6.77%
6	OPERATING INCOME DEFICIENCY	270,020		737,200	45,834	51,870	97,704
7	REVENUE CONVERSION FACTOR	1.6286		1.6286	1.6287	1.6287	1.6287
8	INCREASE IN REVENUE REQUIREMENT	<u>\$439,755</u>		<u>\$1,200,604</u>	<u>\$74,648</u>	<u>\$84,479</u>	<u>\$159,127</u>
9	TEST YEAR REVENUE	1,866,546		1,866,546	1,866,546	0	1,866,546
10	PROPOSED REVENUE	2,306,301		3,067,150	1,941,194	84,479	2,025,673
11	PERCENTAGE INCREASE	23.56%		64.32%	4.00%		8.53%
12	RETURN ON EQUITY						

REFERENCES  
COLUMN (A): COMPANY SCH. A-1  
COLUMN (B): COMPANY SCH. B-1  
COLUMN (C): COMPANY SCH. B-1  
COLUMN (D): SCH. MDC-2, MDC-6 & WAR-1  
COLUMN (E): MDC SURREBUTTAL TEST, SURREBUTTAL SCH. MDC-10  
COLUMN (F): COLUMN (D) + COLUMN (E)

ARIZONA AMERICAN - ANTHEM WASTEWATER  
TEST YEAR ENDING DECEMBER 31, 2002  
OPERATING ADJ #4 - AZ\_AM SALARIES & WAGES

DOCKET NO. W-01303-02-0868  
SURREBUTTAL SCHEDULE MDC-10

LINE NO.	DESCRIPTION	AMOUNT	REFERENCE
1	ACTUAL AZ_AM PAYROLL	\$301,354	COMPANY SPREADSHEET
2	LESS: CAPITALIZED PAYROLL	<u>81,366</u>	LINE 1 x 27%
3	ACTUAL PAYROLL EXPENSE	219,988	LINE 1 - LINE 2
4	ESTIMATED PAYROLL PER AZ-AM	<u>202,123</u>	CO. SCH. C-2 PG. 5
5	PAYROLL ADJUSTMENT	<u>17,865</u>	LINE 3 - LINE 4
6	ACTUAL PAYROLL EXPENSE	219,988	LINE 3
7	PAYROLL TAX FACTOR	<u>7.65%</u>	FICA RATE
8	SUBTOTAL	16,829	LINE 6 x LINE 7
9	FUTA & SUTA TAX	<u>1,470</u>	\$245 X 6 EMPLOYEES
10	PAYROLL TAXES	18,299	LINE 8 + LINE 9
11	ESTIMATED PER COMPANY	<u>17,520</u>	CO. SCH. C-2 PG. 5
12	PAYROLL TAX ADJUSTMENT	<u>779</u>	LINE 10 x LINE 11

INCREMENTAL SURREBUTTAL ADJUSTMENT  
PAYROLL

13	RUCO DIRECT ADJUSTMENT	(48,969)
14	RUCO SURREBUTTAL ADJUSTMENT	<u>17,865</u>
15	RUCO INCREMENTAL ADJUSTMENT	<u>\$66,834</u>

PAYROLL TAXES

16	RUCO DIRECT ADJUSTMENT	(4,334)
17	RUCO SURREBUTTAL ADJUSTMENT	<u>779</u>
18	RUCO INCREMENTAL ADJUSTMENT	<u>\$5,113</u>

**RATE DESIGN**

LINE NO.	DESCRIPTION	(A) RUCO PROPOSED RATE DES'N	(B) ANNUALIZED CUST. & GAL. COUNT	(C) RUCO PROPOSED REVENUE
	<b>MONTHLY MINIMUM USAGE CHARGE:</b>			
1	Residential Units (SSR)	\$ 21.25	30,156	\$ 640,815
2	Small Commercial 5/8	21.25	48	1,020
3	Small Commercial 3/4 inch	31.88	-	-
4	Small Commercial 1 inch	42.50	-	-
5	Large Commercial	85.20	180	15,336
6				
7				
8	Total Annualized Monthly Minimum Usage Charge			\$ 657,171
9				
10				
11	<b>COMMODITY RATES (Per 1,000 Gallons Up to Maximum)</b>			
12				
13	Treatco	2.85	10,648,000	30,347
14	Commercial & Residential	\$ 2.50	Min. 140,842,073	
15	TOTAL ANNUALIZED COMMODITY USAGE AND CHARGES			352,105
16	Other Wastewater Revenue			986,072
17	<b>TOTAL PROPOSED ANNUALIZED REVENUE</b>			<b>\$ 2,025,695</b>
18	Required Revenue (per Schedule MDC-6)			2,025,673
19	difference			\$22



Arizona American Water Company - Anthem Wastewater  
Docket No. SW-01303A-02-0868  
Test Year Ended December 31, 2001

Schedule MDC-16  
Page 2 of 2

**RATE DESIGN - MONTHLY MINIMUM AND COMMODITY CHARGES**

LINE NO.	DESCRIPTION	(A)	(B)	(C)
		PRESENT RATES	COMPANY PROPOSED	RUCO PROPOSED
	<b>MONTHLY MINIMUM USAGE CHARGE:</b>			
1	Residential	16.00	24.24	21.25
2	Small Commercial 5/8	16.00	24.24	21.25
3	Small Commercial 3/4 Inch	24.00	36.36	31.88
4	Small Commercial 1 Inch	32.00	48.48	42.50
5	Large Commercial	64.00	96.96	85.20
6				
7				
8	Total Annualized Monthly Minimum Usage Charge			
9				
10				
11	<b>COMMODITY RATES (Per 1,000 Gallons Up to Maximum)</b>			
12				
13	Treatco	2.32	2.32	2.85
14	Commercial & Residential	2.00	3.03	2.50

ARIZONA AMERICAN - AGUA FRIA WATER  
TEST YEAR ENDING DECEMBER 31, 2001  
REVENUE REQUIREMENTS

DOCKET NO. W-01303-02-0867  
SURREBUTAL SCHEDULE MDC-1  
PAGE 1 OF 2

LINE NO.	DESCRIPTION	(A) PER COMPANY RCND	(B) ADJUSTMENTS TO RESTATE TO ORIGINAL COST	(C) PER COMPANY ORIG. COST	(D) RUCC RECOMMENDED	(E) RUCC SURREBUTAL ADJUSTMENTS	(F) RUCC SURREBUTAL RECOMMENDED
1	RATE BASE	\$19,019,624	10,836,161	29,855,785	16,228,561	0	16,228,561
2	ADJUSTED OPERATING INCOME	1,215,779		1,215,779	1,442,825	(196,110)	1,246,715
3	CURRENT RATE OF RETURN	6.39%		4.07%	8.89%	-1.21%	7.68%
4	REQUIRED OPERATING INCOME	1,474,021		2,313,823	1,066,216	32,457	1,098,674
5	REQUIRED RATE OF RETURN	7.75%		7.75%	6.57%	0.20%	6.77%
6	OPERATING INCOME DE(SUF)FICIENCY	258,242		1,098,044	(376,609)	228,567	(148,042)
7	REVENUE CONVERSION FACTOR	1.6286		1.6286	1.6287	1.6287	1.6287
8	INCREASE IN REVENUE REQUIREMENT	<u>\$420,573</u>		<u>\$1,788,275</u>	<u>(\$613,371)</u>	<u>\$372,260</u>	<u>(\$241,111)</u>
9	TEST YEAR REVENUE	6,186,037		6,186,037	6,186,037	0	6,186,037
10	PROPOSED REVENUE	6,606,610		7,974,312	5,572,666	372,260	5,944,926
11	PERCENTAGE INCREASE	6.80%		28.91%	-9.92%		-3.90%
12	RETURN ON EQUITY						

REFERENCES

COLUMN (A): COMPANY SCH. A-1  
COLUMN (B): COMPANY SCH. B-1  
COLUMN (C): COMPANY SCH. B-1  
COLUMN (D): SCH. MDC-2, MDC-6 & WAR-1  
COLUMN (E): MDC SURREBUTAL TEST, SURREBUTAL SCH. MDC-10  
COLUMN (F): COLUMN (D) + COLUMN (E)

ARIZONA AMERICAN - AGUA FRIA WATER  
TEST YEAR ENDING DECEMBER 31, 2001  
OPERATING ADJ #4 - AZ\_AM PROJECTED SALARIES & WAGES

DOCKET NO. W-01303-02-0867  
SURREBUTTAL SCHEDULE MDC-10

LINE NO.	DESCRIPTION	AMOUNT	
1	ACTUAL AZ_AM PAYROLL	\$875,892	COMPANY SPREADSHEET
2	LESS: CAPITALIZED PAYROLL	<u>236,491</u>	LINE 1 x 27%
3	ACTUAL PAYROLL EXPENSE	639,401	LINE 1 - LINE 2
4	ESTIMATED PAYROLL PER AZ-AM	<u>506,142</u>	CO. SCH. C-2 PG. 5
5	PAYROLL ADJUSTMENT	<u>\$133,259</u>	LINE 3 - LINE 4
6	ACTUAL PAYROLL EXPENSE	639,401	LINE 3
7	PAYROLL TAX FACTOR	<u>7.65%</u>	FICA RATE
8	SUBTOTAL	48,914	LINE 6 x LINE 7
9	FUTA & SUTA TAX	<u>1,715</u>	\$245 X 7 EMPLOYEES
10	PAYROLL TAXES	50,629	LINE 8 + LINE 9
11	ESTIMATED PER COMPANY	<u>40,435</u>	CO. SCH. C-2 PG. 5
12	PAYROLL TAX ADJUSTMENT	<u>\$10,194</u>	LINE 10 x LINE 11
<u>INCREMENTAL SURREBUTTAL ADJUSTMENT</u>			
<u>PAYROLL</u>			
13	RUCO DIRECT ADJUSTMENT	(162,487)	
14	RUCO SURREBUTTAL ADJUSTMENT	<u>133,259</u>	
15	RUCO INCREMENTAL ADJUSTMENT	<u>\$295,746</u>	
<u>PAYROLL TAXES</u>			
16	RUCO DIRECT ADJUSTMENT	(12,430)	
17	RUCO SURREBUTTAL ADJUSTMENT	<u>10,194</u>	
18	RUCO INCREMENTAL ADJUSTMENT	<u>\$22,624</u>	

**RATE DESIGN**

LINE NO.	DESCRIPTION	(A) RUCO PROPOSED RATE DES'N	(B) ANNUALIZED CUST. & GAL. COUNT	(C) RUCO PROPOSED REVENUE
	<b>MONTHLY MINIMUM USAGE CHARGE:</b>			
		\$ 9.30		
1	5/8 X 3/4 - Inch	9.30	143,857	1,337,870.10
2	3/4 - Inch	14.00	1,321	18,494.00
3	1 - Inch	23.50	7,152	168,072.00
4	1 1/2 - Inch	50.00	732	36,600.00
5	2 - Inch	76.10	1,596	121,455.60
6	3 - Inch	144.80	625	90,500.00
7	4 - Inch	186.00	-	-
8	6 - Inch	372.40	25	9,310.00
9	8 - Inch	744.00	0	0.07
10	<b>Private Fire Protection</b>			
11	4 - Inch	27.90	132	3,682.80
12	6 - Inch	42.72	276	11,790.72
13	8 - Inch	55.80	84	4,687.20
14	10 - Inch	111.60	0	0.00
15	12 - Inch	167.40	-	-
	Prison	200.00	1	200.00
16	<b>TOTAL ANNUALIZED MONTHLY CUSTOMER COUNT AND BASIC CHARGE</b>		<u>155,801</u>	<u>\$ 1,802,662</u>
17	<b>NO GALLONS INCLUDED OR PROPOSED IN THE MONTHLY MINIMUM USAGE CHARGE</b>			
18	<b>COMMODITY RATES - ALL METERS (Per 1,000 Gallons):</b>			
	All Meters (Except construction, irrigation, public interruptible)			
19	Tier 1 (0 to 8,000 gallons)	\$ 1.70	419,762,424	\$ 713,596
20	Tier 2 (Above 8,000 gallons)	1.96	1,285,261,576	2,519,113
	Prison	1.96	122,046,000	\$ 239,210
21	Public Interruptible, contract rate	0.90	367,094,000	\$ 330,385
22				
23	Other Revenue			339,961
24	<b>TOTAL PROPOSED ANNUALIZED REVENUE</b>			<u>\$ 5,944,927</u>
25	Required Revenue (per Schedule MDC-6)			5,944,926
26	Difference			<u>\$ 1</u>

**RATE DESIGN - MONTHLY MINIMUM AND COMMODITY CHARGES**

		(A)	(B)	(C)
LINE NO	DESCRIPTION	PRESENT RATES	COMPANY PROPOSED	RUCO PROPOSED
	MONTHLY MINIMUM USAGE CHARGE:			
	Residential Commercial			
1	5/8 X 3/4 - Inch	\$ 10.00	10.76	9.30
2	3/4 - Inch	15.00	16.14	14.00
3	1 - Inch	25.00	26.9	23.50
4	1 1/2 - Inch	53.00	57.02	50.00
5	2 - Inch	80.00	86.07	76.10
6	3 - Inch	155.00	166.76	144.80
7	4 - Inch	200.00	215.17	186.00
8	6 - Inch	400.00	430.34	372.40
9	8 - Inch	800.00	860.67	744.00
10	Private Fire Protection			
11	4 - Inch	30.00	32.28	27.90
12	6 - Inch	45.00	48.41	42.72
13	8 - Inch	60.00	64.55	55.80
14	10 - Inch	120.00	129.1	111.60
15	12 - Inch	180.00	193.65	167.40
16	Prison	200.00	215.17	200.00
17	NO GALLONS INCLUDED OR PROPOSED IN THE MONTHLY MINIMUM USAGE CHARGE			
	COMMODITY RATES - ALL METERS (Per 1,000 Gallons):			
18	All Meters (Except construction, irrigation, public interruptible)			
19	Tier 1 (0 to 8,000 gallons)	\$ 1.78	1.91	1.70
20	Tier 2 (Above 8,000 gallons)	2.24	2.41	1.96
21	Prison	2.02	2.17	1.96
22	Public Interruptible, contract rate	1.00	1.00	0.90

**ARIZONA- AMERICAN WATER COMPANY, INC.**

**DOCKET NOS. WS-01303A-02-0867**

**WS-01303A-02-0868**

**W-01303A-02-0869**

**WS-01303A-02-0870**

**W-01303A-02-0908**

**SURREBUTTAL TESTIMONY**

**OF**

**RODNEY L. MOORE**

**ON BEHALF OF**

**THE**

**RESIDENTIAL UTILITY CONSUMER OFFICE**

**OCTOBER 31, 2003**

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2	SUMMARY OF ADJUSTMENTS .....	1
3	COMPUTATION ERRORS IN DIRECT TESTIMONY .....	2
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6	COST OF CAPITAL.....	9
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**INTRODUCTION**

Q. Please state your name for the record.

A. My name is Rodney Lane Moore.

Q. Have you previously filed testimony regarding this docket?

A. Yes, I have. I filed direct testimony in this docket on September 5, 2003.

Q. What is the purpose of your surrebuttal testimony?

A. My surrebuttal testimony will address the Company's rebuttal comments pertaining to adjustments I sponsored in my direct testimony. I will also correct three minor computational errors in my direct filing.

**SUMMARY OF ADJUSTMENTS**

Q. What areas will you address in your surrebuttal testimony?

A. My surrebuttal testimony will address the following RUCO proposed adjustments:

1. Rate Base Adjustment No. 1 – Test Year Original Cost Rate Base.
2. Rate Base Adjustment No. 2 – Post –Test Year Original Cost Rate Base.
3. Rate Base Adjustment No. 3 – Acquisition Adjustment.
4. Operating Income Adjustment No. 3 – AZ-AM's Service Company Charges.

...



1           5.     Operating Income Adjustment No. 4 – AZ-AM's Salaries and  
2                 Wages.

3           6.     Operating Income Adjustment No. 8 – Additional Corporate  
4                 Overhead.

5           7.     Cost of Capital.

6           8.     Rate Design.

7  
8           I prepared five sets of Surrebuttal Schedules numbered RLM-1, RLM-10,  
9           RLM-17 and RLM-19, which are filed concurrently in support of my  
10           surrebuttal testimony.

11  
12   **COMPUTATION ERRORS IN DIRECT TESTIMONY**

13   Q.     Before you respond to the Company's rebuttal testimony please clarify the  
14           three computation errors you discovered in your direct testimony.

15   A.     First, due to a computation error where an inappropriate plus/minus sign  
16           corrupted the depreciation expense on plant retirements, the accumulated  
17           depreciation balance was overstated in my direct testimony. Corrected  
18           values are shown on Surrebuttal Schedules RLM-1 as adjustment number

19           1.

20   ...

21   ...

22   ...

23   ...

1 Second, due to a computation error where the complete data bank for  
2 projected salaries and wages did not sort properly, the calculated values  
3 were understated. Corrected values are shown on Surrebuttal Schedule  
4 RLM-1 as adjustment number 2.

5  
6 Third, referring to the Sun City Water District only, due to a computation  
7 error on Schedule RLM-14, page 1 where the "Company As Filed" values  
8 were incorrectly transcribed, the test year salary and wage expenses were  
9 overstated. Corrected value is shown on the Sun City Water District  
10 Surrebuttal Schedule RLM-1 as adjustment number 3.

11  
12 **RATE BASE**

13 **Rate Base Adjustment No. 1 – Test Year Original Cost Rate Base**

14 Q. Please explain your adjustment to the test year original cost rate base.

15 A. As explained above, due to a computational error in my plant schedules  
16 the accumulated depreciation was overstated.

17  
18 Q. Do you agree with the Company's rebuttal testimony where it indicates  
19 your accumulated depreciation is overstated for two primary reasons?

20 A. No I do not. The Company contends that, first, RUCO employed a half-  
21 year convention where as AZ-AM employs a half-month convention; and  
22 second, RUCO incorrectly adjusted for historical plant adjustments.

23 ...

1 The half-year convention methodology is the normal process for  
2 calculating accumulated depreciation and absent any justification from the  
3 Company for departure from the generally accepted methodology, I  
4 contend my application of the half-year convention is appropriate.

5  
6 Second, RUCO depreciated the negative historical plant adjustments  
7 using the half-year convention, removed these items from total plant, but  
8 did not remove them from the accumulated depreciation account.  
9 Because these items represent adjustments, as opposed to retirements, I  
10 did not decrease accumulated depreciation. This is the appropriate  
11 accounting method for recording these adjustments.

12  
13 **Rate Base Adjustment No. 2 – Post-Test Year Original Cost Rate Base**

14 Q. Do you agree with the Company's rebuttal testimony that RUCO did not  
15 include any post-test year plant?

16 A. No I do not. Schedule RLM-5 indicates my treatment of post-test year  
17 actual revenue neutral plant additions, AZ-AM's ORCOM billing system  
18 and plant at closing. Moreover, the adjustments are discussed in my  
19 direct testimony at page 14 starting on line 19.

20 ...

21 ...

22 ...

23 ...

**Rate Base Adjustment No. 3 – Acquisition Adjustment**

Q. Have you reviewed the Company's rebuttal testimony regarding the acquisition adjustment?

A. Yes I have. The Company claims in its rebuttal testimony that it is not requesting recovery of the acquisition premium through its proposed RCND rate base.

Q. Is this accurate?

A. Yes it is. However, the Company's position is somewhat misleading. I agree that the RCND rate base proposed by the Company does not include the acquisition adjustment. However, for all the reasons discussed in the direct testimony of RUCO witness Marylee Diaz Cortez at page 8 starting on line 11, RUCO is not recommending that rates be set based on a RCND rate base with an original cost rate of return, as proposed by the Company. RUCO is recommending that rates be set based on an original cost rate base ("OCRB") with an original cost rate of return. The OCRB filed by the Company *does* include an acquisition adjustment, and accordingly, if an OCRB is authorized in this case the acquisition premium does become an issue.

...

...

...

...

1 Q. In its direct filing did the Company request recovery of the acquisition  
2 premium through amortization expense?

3 A. Yes it did. Included in the Company's direct filing is a 40-year  
4 amortization of the acquisition premium. RUCO in its direct filing  
5 recommended disallowance of the acquisition premium amortization  
6 expense.

7  
8 Q. What is the Company's rebuttal position regarding the disallowance of the  
9 acquisition premium amortization?

10 A. In the rebuttal testimony of Company witness David Stephenson at page  
11 10 starting on line 7, the Company states:

12 .... it mistakenly included the recovery of the acquisition premium  
13 through amortization as part of depreciation expense. This was  
14 inappropriate due to the fact that the Company was not requesting that the  
15 revenue requirement in these applications be based on the inclusion of a  
16 return on the premium. This has been corrected by removal of the return  
17 of the premium (amortization) in the revenue requirement.  
18

19 Q. Do you agree with the Company's rebuttal position on the acquisition  
20 premium amortization?

21 A. Yes I do agree with the Company that amortization of the premium should  
22 not be included in the revenue requirement in this case.

23 ...

24 ...

25 ...

26 ...

**OPERATING INCOME**

**Operating Income Adjustment No. 3 – AZ-AM's Service Company Charges**

Q. Do you agree with the Company's suggestion that RUCO's adjustment to the Service Company charges was miscalculated?

A. No I do not. I reconfirmed my analyzes and verified the information provided by the Company in response to RUCO's third data request. The Company's response states the actual 2002 year-to-date AZ-AM Service Company allocation for Arizona was \$4,366,610. Therefore, based on that information I consider my calculations to be correct.

**Operating Income Adjustment No. 4 – AZ-AM's Salaries and Wages**

Q. Please explain your adjustment to AZ-AM's projected salaries.

A. As mentioned above, the criteria used to sort the data representing AZ-AM's 2002 payroll into business units, was incorrect and did not capture the entire record. Therefore, my adjustment to the salaries and wages expense was understated. Please refer to Surrebuttal Schedule RLM-10 for detail supporting my corrected adjustment.

Q. Do you agree with the Company's use of the actual capitalized amount of labor costs to determine the test year level of the AZ-AM salaries and wages expense?

A. No I do not. The use of the across-the-board capitalization rate of 27 percent more accurately computes a typical test year expense. The use

1 of the broad calculation of AZ-AM's capitalized labor costs normalizes the  
2 Company's activity in capital projects and avoids imbedding the effects of  
3 a non-typical high/low demand for plant additions on a specific District's  
4 future rates.

5  
6 Q. Please explain your adjustment to AZ-AM's projected payroll taxes.

7 A. Using the revised net labor charges derived from Company's rebuttal  
8 workpapers, I used the same calculations in my direct testimony to  
9 compute payroll taxes. I reconfirmed my computation and used the actual  
10 FICA, FUTA and SUTA rates as provided by the Company in its response  
11 to RUCO's third data request. Please refer to Surrebuttal Schedule RLM-  
12 10 for detail supporting this adjustment.

13  
14 **Operating Income Adjustment No. 8 – Additional AZ-AM's Corporate**  
15 **Overhead**

16 Q. Do you agree with the Company's rebuttal testimony where it indicates  
17 you made two errors in calculating projected AZ-AM's corporate additional  
18 overhead?

19 A. No I do not. First, the Company suggests I miscalculated the aggregate  
20 total of the expenses; and second, I misappropriated the expenses by  
21 using incorrect allocation factors.

22 ...

23 ...

1 In my direct testimony I utilized data provided by the Company in  
2 response to RUCO's data request number 3.3. I was able to analyze the  
3 actual records associated with the projected corporate overhead. In  
4 reviewing my calculations for surrebuttal testimony, I did make a  
5 reassessment. I classified \$587,410 in the "Office" category and it should  
6 have been classified in the "Employee Benefits" category. However, the  
7 aggregate total for these expenses is correct. The discrepancy between  
8 the Company's rebuttal position and my direct position is a result of a  
9 Company error. Thus, my direct testimony remains unchanged.

10  
11 Second, the allocation factors I used to compute the adjustments in my  
12 direct testimony were provided by the Company in response to RUCO's  
13 third data request. My total projected corporate overhead is correct and  
14 the allocated amounts are appropriate, and thus I have not revised my  
15 corporate overhead adjustment on RLM-14.

16  
17 **COST OF CAPITAL**

18 Q. Was there an adjustment made to the cost of capital?

19 A. Yes there was. RUCO witness William A. Rigsby is recommending an  
20 adjustment to his cost of capital. As a result, RUCO's recommended  
21 weighted cost of capital was increased from 6.57 percent to 6.77 percent.  
22 The revised revenue requirement applicable to this adjustment is shown  
23 on Surrebuttal Schedule RLM-1 as adjustment number 4.



**RATE DESIGN**

Q. Please explain the adjustment to your rate design.

A. After review of the Company's cost of service study provided in its rebuttal testimony, I adjusted the rates to reflect my revisions in the proposed revenue requirement due to my revised calculations and to create an equal percentage increase across all customer classes and commodity charges. Please refer to Surrebuttal Schedule RLM-17 for detail supporting this adjustment.

**CONCLUSION**

Q. What is the overall percentage change due to your revised calculations on the average typical residential customer's monthly statement?

A. The effect of my revised calculations on the average typical residential customer's monthly statement will change over their present billing by the percentages listed below:

	<u>DIRECT TESTIMONY</u>	<u>SURREBUTTAL TESTIMONY</u>
Sun City West Water	12.8%	16.4%
Sun City West Wastewater	28.7%	30.6%
Sun City Water	20.1%	25.9%
Sun City Wastewater	-17.8%	-16.8%
Tubac Water	16.27%	20.1%

Q. Does this conclude your surrebuttal testimony?

A. Yes, it does.



Arizona-American Water Company  
Docket No. W-01303A-02-0868  
Test Year Ended December 31, 2001

Sun City Water District

**SURREBUTTAL**  
**TABLE OF CONTENTS TO RLM SCHEDULES**

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RLM-1	1	REVENUE REQUIREMENT
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**SURREBUTTAL  
REVENUE REQUIREMENT**

LINE NO.	DESCRIPTION	(A) COMPANY RCND	(B) ADJMT TO RESTATE TO ORIGINAL COST	(C) COMPANY ORIGINAL COST	(D) DIRECT RUCO ORIGINAL COST	(E)	(F) SURREBUTTAL RUCO - OCRB ADJUSTMENTS		(G) SURREBUTTAL RUCO - OCRB ADJUSTMENTS		(H) SURREBUTTAL RUCO - OCRB ADJUSTMENTS
						NO. 1	NO. 2	NO. 3	NO. 4	AS ADJUTED	
1	Fair Value Rate Base	\$ 48,703,466	\$ (16,736,610)	\$ 31,966,856	\$ 22,304,176	\$ 49,358	\$ 0	\$ 0	\$ 0	\$ 22,353,535	
2	Adjusted Operat'g Income (Loss)	\$ 476,007		\$ 476,007	\$ 260,008	\$ 556	\$ (44,863)	\$ 331,827	\$ (517)	\$ 547,011	
3	Current Rate Of Return (L2 / L1)	0.98%		1.49%	1.17%					2.45%	
4	Req. Operat'g Income (L5 X L1)	\$ 3,774,295		\$ 2,477,431	\$ 1,465,517	\$ 3,244	\$ 0	\$ 0	\$ 43,489	\$ 1,512,250	
5	Req'd Rate Of Return On FVRB	7.75%		7.75%	6.57%				0.20%	6.77%	
6	Operat'g Inc. Def'y (L4 - L2)	\$ 3,298,287		\$ 2,001,424	\$ 1,205,509	\$ 2,689	\$ 44,863	\$ (331,827)	\$ 44,005	\$ 965,239	
7	Gross Rev. Factor (RLM-1, Pg 2)	1.6286		1.6286	1.6286	1.6286	1.6286	1.6286	1.6286	1.6286	
8	Incr. In Gross Rev. Req't (L7 X L6)	\$ 5,371,706		\$ 3,259,520	\$ 1,963,334	\$ 4,377	\$ 73,065	\$ (540,424)	\$ 71,669	\$ 1,572,021	
9	Adjusted Test Year Revenue	\$ 6,193,090		\$ 6,193,090	\$ 6,193,090	\$ 0	\$ 0	\$ 0	\$ 0	\$ 6,193,090	
10	Proposed Annual Rev. (L8 + L9)	\$ 11,559,457		\$ 9,452,610	\$ 8,156,424	\$ 4,377	\$ 73,065	\$ (540,424)	\$ 71,669	\$ 7,765,111	
11	Req'd % Increase In Rev. (L8 / L9)	86.74%		52.63%	31.70%	0.07%	1.18%	-8.73%	1.16%	25.38%	
12	Rate Of Return On Common Eq'ty	11.50%		11.50%	9.11%				0.50%	9.61%	

**References:**

Column (A): Company Schedules A-1 and C-1  
Column (B): RUCO Schedule RLM-2  
Column (C): Recalculated After Adjusting To OCRB  
Column (D): RUCO Schedules RLM-3, RLM-6 And RLM-19  
Column (E): Adjustment No. 1 - Computation Error In Direct Plant Schedules - See Surrebuttal Testimony  
Column (F): Adjustment No. 2 - Computation Error In Direct Gross Salaries And Wages - See RUCO Surrebuttal Schedules RLM-10  
Column (G): Adjustment No. 3 - SUN CITY WATER DISTRICT ONLY Computation Error In Projected Corporate Overhead - See Surrebuttal Testimony  
Column (H): Adjustment No. 4 - RUCO Revised Cost Of Capital - See William Fligby's Surrebuttal Testimony  
Column (I): Sum Of Columns (D) Thru Column (H)

**SURREBUTTAL**  
**EXPLANATION OF OPERATING INCOME ADJUSTMENT NO. 4**  
**PROJECTED SALARIES AND WAGES**

LINE NO.	COMPANY	AZ-AM BUSINESS UNIT	(A) GROSS PAYROLL	(B) CAPITAL'D PAYROLL	(C) NET PAYROLL	(D) EMP. COUNT	(E) PAYROLL TAX
1	Sun City West Water	2364	\$ 377,644	\$ 101,964	\$ 275,680	6	\$ 22,560
2	Sun City West W/W	2365	434,380	117,283	317,097	9	26,463
3	Sun City Water	2362	861,122	232,503	628,619	24	53,969
4	Sun City Wastewater	2363	86,478	23,349	63,129	4	5,809
5	Tubac	2389	76,355	20,616	55,739	1	4,509
6	Agua Fria	2361	875,892	236,491	639,401	7	50,629
7	Anthem Water	2381 & 2383	460,581	124,357	336,224	12	28,661
8	Agua Fria, Anthem W/W	2382 & 2384	301,354	81,366	219,988	6	18,299
9	Mohave Water	2371	651,510	175,908	475,602	15	40,059
10	Havasu Water	2373	144,850	39,110	105,741	3	8,824
11	TOTALS		\$ 4,270,166	\$ 1,152,945	\$ 3,117,221	87	\$ 259,782
12	Company Rebuttal		4,270,021	985,673	3,284,348		
13	Difference		\$ 145	\$ 167,272	\$ (151,582)		

	COMPANY AS FILED	RUCO SURREBUTTAL	REVISED ADJUSTMENT	SURREBUTTAL DIFFERENCE
14 SUN CITY WEST WATER				
Rebuttal Adjustment No. 1 Salaries And Wages	\$ 347,733	\$ 275,680	\$ (72,053)	\$ (26,061)
15 Rebuttal Adjustment No. 2 Payroll Tax	28,072	22,560	(5,512)	(1,994)
16 TOTAL	\$ 375,805	\$ 298,240	\$ (77,565)	\$ (28,055)

	COMPANY AS FILED	RUCO SURREBUTTAL	REVISED ADJUSTMENT	SURREBUTTAL DIFFERENCE
17 SUN CITY WEST WASTEWATER				
Rebuttal Adjustment No. 1 Salaries And Wages	\$ 445,070	\$ 317,097	\$ (127,973)	\$ (11,518)
18 Rebuttal Adjustment No. 2 Payroll Tax	36,253	26,463	(9,790)	(881)
19 TOTAL	\$ 481,323	\$ 343,560	\$ (137,763)	\$ (12,399)

	COMPANY AS FILED	RUCO SURREBUTTAL	REVISED ADJUSTMENT	SURREBUTTAL DIFFERENCE
20 SUN CITY WATER				
Rebuttal Adjustment No. 1 Salaries And Wages	\$ 734,448	\$ 628,619	\$ (105,829)	\$ (39,661)
21 Rebuttal Adjustment No. 2 Payroll Tax	62,065	53,969	(8,096)	(33,403)
22 TOTAL	\$ 796,513	\$ 682,588	\$ (113,925)	\$ (73,064)

	COMPANY AS FILED	RUCO SURREBUTTAL	REVISED ADJUSTMENT	SURREBUTTAL DIFFERENCE
23 SUN CITY WASTEWATER				
Rebuttal Adjustment No. 1 Salaries And Wages	\$ 88,549	\$ 63,129	\$ (25,420)	\$ (4,727)
24 Rebuttal Adjustment No. 2 Payroll Tax	7,754	5,809	(1,945)	(361)
25 TOTAL	\$ 96,303	\$ 68,938	\$ (27,365)	\$ (5,088)

	COMPANY AS FILED	RUCO SURREBUTTAL	REVISED ADJUSTMENT	SURREBUTTAL DIFFERENCE
26 TUBAC				
Rebuttal Adjustment No. 1 Salaries And Wages	\$ 59,664	\$ 55,739	\$ (3,925)	\$ (6,067)
27 Rebuttal Adjustment No. 2 Payroll Tax	4,809	4,509	(300)	(464)
28 TOTAL	\$ 64,473	\$ 60,248	\$ (4,225)	\$ (6,531)

References:

Columns (A) (D): Company Rebuttal Workpapers On AZ-AM 2002 Payroll  
Column (B): As Per Company Rebuttal Workpapers On AZ-AM 2002 Payroll - Capitalized Plant Is 27% Of Gross Plant  
Column (C): Column (A) - Column (B)  
Column (E): Column (C) X 7.65% (FICA) + \$245 X Column (D) (FUTA & SUTA)

**SURREBUTTAL**  
**RATE DESIGN - MONTHLY MINIMUM AND COMMODITY CHARGES**

LINE NO.	DESCRIPTION	(A) PRESENT RATES	(B) COMPANY PROPOSED	(C) RUCO PROPOSED	(D) PERCENTAGE INCREASE
<b>MONTHLY MINIMUM USAGE CHARGE:</b>					
	Residential, Commercial				
1	5/8 X 3/4 - Inch	\$ 5.00	\$ 9.43	\$ 6.30	26%
2	3/4 - Inch	5.00	9.43	6.30	26%
3	1 - Inch	13.00	24.51	16.37	26%
4	1 1/2 - Inch	28.00	52.78	35.06	25%
5	2 - Inch	41.00	77.29	51.61	26%
6	3 - Inch	70.00	131.95	88.11	26%
7	4 - Inch	103.00	194.16	129.65	26%
8	6 - Inch	141.00	265.79	177.48	26%
	Private Fire Protection				
9	Flat Rate 3 - Inch	\$ 6.00	\$ 11.31	\$ 7.56	26%
10	Flat Rate 4 - Inch	9.00	16.97	11.34	26%
11	Flat Rate 6 - Inch	12.50	23.56	15.74	26%
12	Flat Rate 8 - Inch	20.00	37.70	25.19	26%
13	Flat Rate 10 - Inch	30.00	56.55	37.78	26%
14	Standby	\$ 3.50	\$ 6.60	\$ 4.41	26%
	Public Interruptible				
15	3 - Inch	\$ 0.00	\$ 0.00	\$ 0.00	0%
16	8 - Inch	0.00	0.00	0.00	0%
	Irrigation				
17	1 - Inch	\$ 13.00	\$ 24.51	\$ 16.37	26%
18	1 1/2 - Inch	28.00	52.78	35.26	26%
19	2 - Inch	41.00	77.29	51.63	26%
20	3 - Inch	70.00	131.95	88.14	26%
21	4 - Inch	103.00	194.16	129.69	26%
22	6 - Inch	141.00	265.48	177.33	26%

NO GALLONS INCLUDED OR PROPOSED IN THE MONTHLY MINIMUM USAGE CHARGE

**COMMODITY RATES (Per 1,000 Gallons)**

All Meters (Except construction, irrigation, public interruptible):					
23	Tier 1 (0 to 8,000 Gallons)	\$ 0.73	\$ 1.38	\$ 0.92	26%
24	Tier 2 (Above 8,001 Gallons)	0.92	1.73	1.16	26%
Construction, Irrigation, Public Interruptible Meters:					
25	Construction / Untreated CAP	\$ 0.50	\$ 0.94	\$ 0.63	26%
26	Irrigation	0.65	1.23	0.82	27%
27	Public Interruptible	0.50	0.94	0.63	26%

References:

Columns (A) (B): Company Schedule H-3, Page 3  
Column (C): Surrebuttal Testimony, RLM  
Column (D): Column (C) - Column (A) / Column (A)

**~~SURREBUTTAL~~**  
**TYPICAL BILL ANALYSIS**  
**RESIDENTIAL WATER SERVICE TO 5/8 X 3/4 INCH METERS**

LINE NO.	<b>COMPANY PROPOSED AS FILED</b>					
	USAGE	(A) GALLONS CONSUMED	(B) PRESENT RATES	(C) PROPOSED RATES	(D) DOLLAR INCREASE	(E) PERCENT INCREASE
1	Average	8,361	\$11.17	\$21.09	\$9.92	88.8%
2	Median	6,516	\$9.76	\$18.42	\$8.67	88.8%

**RUCO SURREBUTTAL PROPOSED**

3	Average	8,361	\$11.17	\$14.07	\$2.90	25.9%
4	Median	6,516	\$9.76	\$12.29	\$2.53	25.9%
5	Average Number Of Customers: 19214					

**PRESENT AND PROPOSED RATES (WITHOUT TAXES)**

	Gallons Consumed	Present Rates	Company		RUCO	
			Prop'd Rates	% Increase	Prop'd Rates	% Increase
6	0	\$5.00	\$9.43	88.6%	\$6.30	25.9%
7	1,000	5.73	10.81	88.7%	7.22	25.9%
8	2,000	6.46	12.19	88.7%	8.14	25.9%
9	3,000	7.19	13.57	88.7%	9.05	25.9%
10	4,000	7.92	14.95	88.8%	9.97	25.9%
11	5,000	8.65	16.33	88.8%	10.89	25.9%
12	6,000	9.38	17.71	88.8%	11.81	25.9%
13	7,000	10.11	19.09	88.8%	12.73	25.9%
14	8,000	10.84	20.47	88.8%	13.65	25.9%
15	9,000	11.76	22.20	88.8%	14.81	25.9%
16	10,000	12.68	23.93	88.7%	15.97	25.9%
17	15,000	17.28	32.58	88.5%	21.76	25.9%
18	20,000	21.88	41.23	88.4%	27.56	25.9%
19	25,000	26.48	49.88	88.4%	33.35	25.9%
20	50,000	49.48	93.13	88.2%	62.31	25.9%
21	75,000	72.48	136.38	88.2%	91.28	25.9%
22	100,000	95.48	179.63	88.1%	120.24	25.9%
23	125,000	118.48	222.88	88.1%	149.21	25.9%
24	150,000	141.48	266.13	88.1%	178.18	25.9%
25	175,000	164.48	309.38	88.1%	207.14	25.9%
26	200,000	187.48	352.63	88.1%	236.11	25.9%

Arizona-American Water Company  
Docket No. SW-01303A-02-0868  
Test Year Ended December 31, 2001

Sun City Wastewater District

~~SURREBUTTAL~~

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RLM-17	1	RATE DESIGN - MONTHLY MINIMUM, COMMODITY AND SERVICE CHARGES
RLM-19	1	TYPICAL BILL ANALYSIS



SURREBUTTAL  
REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	(A) COMPANY RCND	(B) ADJMT TO RESTATE TO ORIGINAL COST	(C) COMPANY ORIGINAL COST	(D) DIRECT RUCO ORIGINAL COST	(E)	(F) SURREBUTTAL RUCO - OCRB ADJUSTMENTS		(H)	(I) SURRE'L RUCO OCRB AS ADJ'ED
						NO. 1	NO. 2	NO. 3	NO. 4	
1	Fair Value Rate Base	\$ 20,233,577	\$ (6,191,840)	\$ 14,041,737	\$ 8,893,529	\$ 35,623	\$ 0	\$ 0	\$ 0	\$ 8,929,152
2	Adjusted Operating Income (Loss)	\$ 1,175,416		\$ 1,175,416	\$ 1,133,760	\$ 0	\$ (3,124)		\$ (468)	\$ 1,130,168
3	Current Rate Of Return (L2 / L1)	5.81%		8.37%	12.75%					12.66%
4	Required Operating Income (L5 X L1)	\$ 1,568,009		\$ 1,088,235	\$ 584,358	\$ 2,340	\$ 0		\$ 17,372	\$ 604,070
5	Req'd Rate Of Return On Fair Value R	7.75%		7.75%	6.57%				0.20%	6.77%
6	Operating Income Deficiency (L4 - L2)	\$ 392,593		\$ (87,181)	\$ (549,402)	\$ 2,341	\$ 3,124		\$ 17,840	\$ (526,097)
7	Gross Revenue Conv. Factor (RLM-1,	1.6286		1.6286	1.6286	1.6286	1.6286		1.6286	1.6286
8	Increase In Gross Revenue Req'm't (L	\$ 639,391		\$ (141,984)	\$ (894,775)	\$ 3,812	\$ 5,088		\$ 29,054	\$ (856,821)
9	Adjusted Test Year Revenue	\$ 5,088,340		\$ 5,088,340	\$ 5,088,340	\$ 0	\$ 0		\$ 0	\$ 5,088,340
10	Proposed Annual Revenue (L8 + L9)	\$ 5,727,731		\$ 4,946,356	\$ 4,193,565	\$ 3,812	\$ 5,088		\$ 29,054	\$ 4,231,519
11	Req'd Percentage Increase In Revenue	12.57%		-2.79%	-17.58%	0.07%	0.10%		0.58%	-16.84%
12	Rate Of Return On Common Equity	11.50%		11.50%	9.11%	0.00%	0.00%		0.50%	9.61%

References:

- Column (A): Company Schedules A-1 and C-1
- Column (B): RUCO Schedule RLM-2
- Column (C): Recalculated After Adjusting To OCRB
- Column (D): RUCO Schedules RLM-3, RLM-6 And RLM-19
- Column (E): Adjustment No. 1 - Computation Error In Direct Plant Schedules - See Surrebuttal Testimony
- Column (F): Adjustment No. 2 - Computation Error In Direct Gross Salaries And Wages - See RUCO Surrebuttal Schedules RLM-10
- Column (G): Adjustment No. 3 - SUN CITY WATER DISTRICT ONLY Computation Error In Projected Corporate Overhead - See Surrebuttal Testimony
- Column (H): Column (D) + Column (E) + Column (F) + Column (G)

**SURREBUTTAL**  
**EXPLANATION OF OPERATING INCOME ADJUSTMENT NO. 4**  
**PROJECTED SALARIES AND WAGES**

LINE NO.	AZ-AM BUSINESS UNIT	(A) GROSS PAYROLL	(B) CAPITAL'D PAYROLL	(C) NET PAYROLL	(D) EMP. COUNT	(E) PAYROLL TAX
1	Sun City West Water 2364	\$ 377,644	\$ 101,964	\$ 275,680	6	\$ 22,560
2	Sun City West W/W 2365	434,380	117,283	317,097	9	26,463
3	Sun City Water 2362	861,122	232,503	628,619	24	53,969
4	Sun City Wastewater 2363	86,478	23,349	63,129	4	5,809
5	Tubac 2389	76,355	20,616	55,739	1	4,509
6	Agua Fria 2361	875,892	236,491	639,401	7	50,629
7	Anthem Water 2381 & 2383	460,581	124,357	336,224	12	28,661
8	Agua Fria, Anthem W/W 2382 & 2384	301,354	81,366	219,988	6	18,299
9	Mohave Water 2371	651,510	175,908	475,602	15	40,059
10	Havasu Water 2373	144,850	39,110	105,741	3	8,824
11	TOTALS	\$ 4,270,166	\$ 1,152,945	\$ 3,117,221	87	\$ 259,782
12	Company Rebuttal	4,270,021	985,673	3,268,803		
13	Difference	\$ 145	\$ 167,272	\$ (151,582)		

	COMPANY AS FILED	RUCO SURREBUTTAL	REVISED ADJUSTMENT	SURREBUTTAL DIFFERENCE
14 SUN CITY WEST WATER				
Rebuttal Adjustment No. 1 Salaries And Wages	\$ 347,733	\$ 275,680	\$ (72,053)	\$ (26,061)
15 Rebuttal Adjustment No. 2 Payroll Tax	28,072	22,560	(5,512)	(1,994)
16 TOTAL	\$ 375,805	\$ 298,240	\$ (77,565)	\$ (28,055)

	COMPANY AS FILED	RUCO SURREBUTTAL	REVISED ADJUSTMENT	SURREBUTTAL DIFFERENCE
17 SUN CITY WEST WASTEWATER				
Rebuttal Adjustment No. 1 Salaries And Wages	\$ 445,070	\$ 317,097	\$ (127,973)	\$ (11,518)
18 Rebuttal Adjustment No. 2 Payroll Tax	36,253	26,463	(9,790)	(881)
19 TOTAL	\$ 481,323	\$ 343,560	\$ (137,763)	\$ (12,399)

	COMPANY AS FILED	RUCO SURREBUTTAL	REVISED ADJUSTMENT	SURREBUTTAL DIFFERENCE
20 SUN CITY WATER				
Rebuttal Adjustment No. 1 Salaries And Wages	\$ 734,448	\$ 628,619	\$ (105,829)	\$ (39,661)
21 Rebuttal Adjustment No. 2 Payroll Tax	62,065	53,969	(8,096)	(33,403)
22 TOTAL	\$ 796,513	\$ 682,588	\$ (113,925)	\$ (73,064)

	COMPANY AS FILED	RUCO SURREBUTTAL	REVISED ADJUSTMENT	SURREBUTTAL DIFFERENCE
23 SUN CITY WASTEWATER				
Rebuttal Adjustment No. 1 Salaries And Wages	\$ 88,549	\$ 63,129	\$ (25,420)	\$ (4,727)
24 Rebuttal Adjustment No. 2 Payroll Tax	7,754	5,809	(1,945)	(361)
25 TOTAL	\$ 96,303	\$ 68,938	\$ (27,365)	\$ (5,088)

	COMPANY AS FILED	RUCO SURREBUTTAL	REVISED ADJUSTMENT	SURREBUTTAL DIFFERENCE
26 TUBAC				
Rebuttal Adjustment No. 1 Salaries And Wages	\$ 59,664	\$ 55,739	\$ (3,925)	\$ (6,067)
27 Rebuttal Adjustment No. 2 Payroll Tax	4,809	4,509	(300)	(464)
28 TOTAL	\$ 64,473	\$ 60,248	\$ (4,225)	\$ (6,531)

References:

Columns (A) (D): Company Rebuttal Workpapers On AZ-AM 2002 Payroll

Column (B): As Per Company Rebuttal Workpapers On AZ-AM 2002 Payroll - Capitalized Plant Is 27% Of Gross Plant

Column (C): Column (A) - Column (B)

Column (E): Column (C) X 7.65% (FICA) + \$245 X Column (D) (FUTA & SUTA)

**SURREBUTTAL**  
**RATE DESIGN - MONTHLY MINIMUM AND COMMODITY CHARGES**

LINE NO.	DESCRIPTION	(A) PRESENT RATES	(B) COMPANY PROPOSED	(C) RUCO PROPOSED	(D) PERCENTAGE INCREASE
<b>MONTHLY MINIMUM USAGE CHARGE:</b>					
1	Residential Units (SSR)	\$ 12.87	\$ 14.48	\$ 10.70	-17%
2	Commercial/Residential Units (SSR)	12.87	14.48	10.70	-17%
3	Commercial Units (SSC)	15.46	17.39	12.85	-17%
4	Commercial Larger User (SS6)	32.80	36.90	27.27	-17%
5	Multi-Family Residential Units (AC SSR)	12.87	14.48	10.70	-17%
6	SS1 (Commercial, Additional Toilets)	3.78	4.25	3.14	-17%
7	SS2 (Commercial Restaurant)	29.10	32.74	24.20	-17%
8	SS3 (Commercial Laundromat)	7.06	7.94	5.87	-17%
9	SS4 (Commercial, Per Wash Rack)	14.40	16.20	11.97	-17%
10	Rental Rooms	7.99	8.99	6.64	-17%
11	Paradise Resort Park, Contract Rate	3.94	3.94	3.28	-17%
<b>GALLONS IN MINIMUM</b>					
12	Commercial SS6 And Paradise Park Resort	20,000	20,000	20,000	0%
<b>COMMODITY RATES (Per 1,000 Gallons Over Minimum)</b>					
13	Commercial SS6 And Paradise Park Resort	\$ 1.24	\$ 1.40	\$ 1.03	-17%
<b>ANNUAL FEE FOR INDUSTRIAL DISCHARGE SERVICE</b>					
For Those Customers Consuming An Amount Of Water Less Than Or Equal To 50,000 Gallons Per Month Through One Or More Water Or Equal To 50,000 Gallons Per Month Through One Or More Water Meters To The Same Facility, Inclusive Of Meters Used For Irrigation.					
14		\$ 500.00	\$ 500.00	\$ 500.00	0%
For Those Customers Consuming An Amount Of Water Greater Than 50,000 Gallons Per Month Through One Or More Water Meters To The Same Facility, Inclusive Of Meters Used For Irrigation.					
15		\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	0%

Annual Fee For Industrial Discharge Service Charges Shall Be Non-Refundable And Shall Be Assessed In Advance Each January By The Company By Special Billing. For New Customers Receiving This Service, A Prorated Charge Shall Be Assessed.

**References:**

Columns (A) (B): Company Schedule H-3, Page 3  
Column (C): Surrebuttal Testimony, RLM  
Column (D): Column (C) - Column (A) / Column (A)

Arizona-American Water Company  
Docket No. SW-01303A-02-0868  
Test Year Ended December 31, 2001

Sun City Wastewater District  
Surrebuttal Schedule RLM-19  
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**SURREBUTTAL  
TYPICAL BILL ANALYSIS  
WASTEWATER SERVICE TO RESIDENTIAL UNITS**

<b>COMPANY PROPOSED AS FILED</b>						
LINE NO.	USAGE	(A) GALLONS CONSUMED	(B) PRESENT RATES	(C) PROPOSED RATES	(D) DOLLAR INCREASE	(E) PERCENT INCREASE
1	Average	0	\$12.87	\$14.48	\$1.61	12.5%
<b>RUCO SURREBUTTAL PROPOSED</b>						
2	Average	0	\$12.87	\$ 10.70	(\$2.17)	-16.8%
3	Average Number Of Customers:		18,910			

Arizona-American Water Company  
Docket No. W-01303A-02-0867  
Test Year Ended December 31, 2001

Sun City West Water District

**SURREBUTTAL**  
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RLM-1	1	REVENUE REQUIREMENT
RLM-10	1	EXPLANATION OF OPERATING INCOME ADJUSTMENT NO. 4 - PROJECTED SALARIES AND WAGES
RLM-17	1	RATE DESIGN - MONTHLY MINIMUM, COMMODITY AND SERVICE CHARGES
RLM-19	1	TYPICAL BILL ANALYSIS

SURREBUTTAL  
REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	(A) COMPANY RCND	(B) ADJMT TO RESTATE TO ORIGINAL COST	(C) COMPANY ORIGINAL COST	(D) DIRECT RUCO ORIGINAL COST	(E)	(F)	(G)	(H)	(I)
						NO. 1	NO. 2	NO. 3	NO. 4	AS ADJ'TED
1	Fair Value Rate Base	\$ 16,407,508	\$ 3,575,535	\$ 19,983,043	\$ 11,366,817	\$ 17,253	\$ 0	\$ 0	\$ 0	\$ 11,384,070
2	Adjusted Operat'g Income (Loss)	\$ 361,287		\$ 361,287	\$ 452,321	\$ 195	\$ (17,225)		\$ (264)	\$ 435,027
3	Current Rate Of Return (L2 / L1)	2.20%		1.81%	3.98%					3.82%
4	Req. Operat'g Income (L5 X L1)	\$ 1,271,506		\$ 1,548,686	\$ 746,868	\$ 1,132	\$ 0		\$ 22,149	\$ 770,149
5	Req'd Rate Of Return On FVRB	7.75%		7.75%	6.57%				0.20%	6.77%
6	Operat'g Inc. Def'y (L4 - L2)	\$ 910,219		\$ 1,187,399	\$ 294,546	\$ 941	\$ 17,225		\$ 22,411	\$ 335,123
7	Gross Rev. Factor (RLM-1, Pg 2)	1.6286		1.6286	1.6286	1.6286	1.6286		1.6286	1.6286
8	Incr. In Gross Rev. Req't (L7 X L6)	\$ 1,482,414		\$ 1,933,798	\$ 479,708	\$ 1,532	\$ 28,053		\$ 36,499	\$ 545,792
9	Adjusted Test Year Revenue	\$ 3,380,774		\$ 3,380,774	\$ 3,380,774	\$ 0	\$ 0		\$ 0	\$ 3,380,774
10	Proposed Annual Rev. (L8 + L9)	\$ 4,863,188		\$ 5,314,572	\$ 3,860,482	\$ 1,530	\$ 28,055		\$ 36,500	\$ 3,926,566
11	Req'd % Increase In Rev. (L8 / L9)	43.85%		57.20%	14.19%	0.05%	0.83%		1.08%	16.14%
12	Rate Of Return On Common Eq'ty	11.50%		11.50%	9.11%	0.00%	0.00%		0.50%	9.61%

References:

- Column (A): Company Schedules A-1 and C-1
- Column (B): RUCO Schedule RLM-2
- Column (C): Recalculated After Adjusting To OCRB
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- Column (I): Sum Of Columns (D) Thru Column (H)

**SURREBUTTAL**  
**EXPLANATION OF OPERATING INCOME ADJUSTMENT NO. 4**  
**PROJECTED SALARIES AND WAGES**

LINE NO.	COMPANY	AZ-AM BUSINESS UNIT	(A) GROSS PAYROLL	(B) CAPITAL'D PAYROLL	(C) NET PAYROLL	(D) EMP. COUNT	(E) PAYROLL TAX
1	Sun City West Water	2364	\$ 377,644	\$ 101,964	\$ 275,680	6	\$ 22,560
2	Sun City West W/W	2365	434,380	117,283	317,097	9	26,463
3	Sun City Water	2362	861,122	232,503	628,619	24	53,969
4	Sun City Wastewater	2363	86,478	23,349	63,129	4	5,809
5	Tubac	2389	76,355	20,616	55,739	1	4,509
6	Agua Fria	2361	875,892	236,491	639,401	7	50,629
7	Anthem Water	2381 & 2383	460,581	124,357	336,224	12	28,661
8	Agua Fria, Anthem W/W	2382 & 2384	301,354	81,366	219,988	6	18,299
9	Mohave Water	2371	651,510	175,908	475,602	15	40,059
10	Havasut Water	2373	144,850	39,110	105,741	3	8,824
11	TOTALS		\$ 4,270,166	\$ 1,152,945	\$ 3,117,221	87	\$ 259,782
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Column (C): Column (A) - Column (B)  
Column (E): Column (C) X 7.65% (FICA) + \$245 X Column (D) (FUTA & SUTA)

**SURREBUTTAL**  
**RATE DESIGN - MONTHLY MINIMUM AND COMMODITY CHARGES**

LINE NO.	DESCRIPTION	(A) PRESENT RATES	(B) COMPANY PROPOSED	(C) RUCO PROPOSED	(D) PERCENTAGE INCREASE
<b>MONTHLY MINIMUM USAGE CHARGE:</b>					
1	5/8 X 3/4 - Inch	\$ 5.00	\$ 7.23	\$ 5.82	16%
2	3/4 - Inch	5.00	7.23	5.82	16%
3	1 - Inch	13.00	18.80	15.13	16%
4	1 1/2 - Inch	28.00	40.49	32.59	16%
5	2 - Inch	41.00	59.29	47.73	16%
6	3 - Inch	70.00	101.22	81.48	16%
7	4 - Inch	103.00	148.94	119.89	16%
8	6 - Inch	141.00	203.89	164.13	16%
9	Construction (To Be Canceled - N/A)	8.00	N/A	N/A	N/A
10	General Fire Sprinkler Rate 4 - Inch	30.00	43.38	34.92	16%
11	General Fire Sprinkler Rate 6 - Inch	45.00	65.07	52.38	16%
12	General Fire Sprinkler Rate 8 - Inch	60.00	86.76	69.84	16%
13	General Fire Sprinkler Rate 10 - Inch	120.00	173.52	139.68	16%

NO GALLONS INCLUDED OR PROPOSED IN THE MONTHLY MINIMUM USAGE CHARGE

**COMMODITY RATES - ALL METERS (Per 1,000 Gallons):**

14	Tier 1 (0 to 8,000 Gallons)	\$ 0.93	\$ 1.34	\$ 1.08	16%
15	Tier 2 (Above 8,001 Gallons)	1.12	1.62	1.30	16%
16	Effluent Sales (Per Acre Foot)	150.00	216.90	174.60	16%
17	CAP - Raw Water (Per 1,000 Gallons)	0.50	0.72	0.58	16%

In Addition, Company Shall Collect Groundwater Saving Fee Per Decision No. 62203  
Ground Waterdrawal Fees Shall Be Collected As An Assessment,  
And Is Subject To Annual Revisions As Required Due To Changes  
In Rates Charged By The Arizona Department Of Water Resources (ADWR).  
Includes An Allowance Of 10% Lost And Unaccounted For Water.

**References:**

Columns (A) (B): Company Schedule H-3, Page 3  
Column (C): Surrebuttal Testimony, RLM  
Column (D): Column (C) - Column (A) / Column (A)



~~SURREBUTTAL~~  
**TYPICAL BILL ANALYSIS**  
**RESIDENTIAL WATER SERVICE TO 5/8 X 3/4 INCH METERS**

		(A)	(B)	(C)	(D)	(E)
COMPANY PROPOSED AS FILED						
LINE NO.	USAGE	GALLONS CONSUMED	PRESENT RATES	PROPOSED RATES	DOLLAR INCREASE	PERCENT INCREASE
1	Average	7,102	\$11.60	\$16.75	\$5.14	44.3%
2	Median	5,610	\$10.22	\$14.75	\$4.53	44.3%

**RUCO SURREBUTTAL PROPOSED**

3	Average	7,102	\$11.60	\$13.51	\$1.90	16.4%
4	Median	5,610	\$10.22	\$11.89	\$1.68	16.4%
5	Average Number Of Customers:		14,463			

**PRESENT AND PROPOSED RATES (WITHOUT TAXES)**

	Gallons Consumed	Present Rates	Company		RUCO	
			Prop'd Rates	% Increase	Prop'd Rates	% Increase
6	0	\$5.00	\$7.23	44.6%	\$5.82	16.4%
7	1,000	5.93	8.57	44.5%	6.90	16.4%
8	2,000	6.86	9.91	44.5%	7.99	16.4%
9	3,000	7.79	11.25	44.4%	9.07	16.4%
10	4,000	8.72	12.59	44.4%	10.15	16.4%
11	5,000	9.65	13.93	44.4%	11.23	16.4%
12	6,000	10.58	15.27	44.3%	12.32	16.4%
13	7,000	11.51	16.61	44.3%	13.40	16.4%
14	8,000	12.44	17.95	44.3%	14.48	16.4%
15	9,000	13.56	19.57	44.3%	15.78	16.4%
16	10,000	14.68	21.19	44.3%	17.09	16.4%
17	15,000	20.28	29.29	44.4%	23.61	16.4%
18	20,000	25.88	37.39	44.5%	30.12	16.4%
19	25,000	31.48	45.49	44.5%	36.64	16.4%
20	50,000	59.48	85.99	44.6%	69.23	16.4%
21	75,000	87.48	126.49	44.6%	101.83	16.4%
22	100,000	115.48	166.99	44.6%	134.42	16.4%
23	125,000	143.48	207.49	44.6%	167.01	16.4%
24	150,000	171.48	247.99	44.6%	199.60	16.4%
25	175,000	199.48	288.49	44.6%	232.19	16.4%
26	200,000	227.48	328.99	44.6%	264.79	16.4%

Arizona-American Water Company  
Docket No. SW-01303A-02-0867  
Test Year Ended December 31, 2001

Sun City West Wastewater District

**SURREBUTTAL**  
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SURREBUTTAL  
REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	(A) COMPANY RCND	(B) ADJMT TO RESTATE TO ORIGINAL COST	(C) COMPANY ORIGINAL COST	(D) DIRECT RUCO ORIGINAL COST	(E) NO. 1	(F) NO. 2	(G) NO. 3	(H) NO. 4	(I) SURREBUTTAL RUCO -OCRB ADJUSTMENTS	(I) SURREBUTTAL RUCO OCRB AS ADJ'TED
1	Fair Value Rate Base	\$ 13,455,978	\$ 5,794,789	\$ 19,250,767	\$ 10,470,538	\$ 70,854	\$ 0	\$ 0	\$ 0	\$ 0	\$ 10,541,392
2	Adjusted Operat'g Income (Loss)	\$ (164,369)		\$ (164,369)	\$ 57,146	\$ 798	\$ (7,613)		\$ (244)	\$	\$ 50,087
3	Current Rate Of Return (L2 / L1)	-1.22%		-0.85%	0.55%						0.48%
4	Req. Operat'g Income (L5 X L1)	\$ 1,042,776		\$ 1,491,934	\$ 687,977	\$ 0	\$ 0		\$ 20,509	\$	\$ 713,141
5	Req'd Rate Of Return On FVRB	7.75%		7.75%	6.57%				0.20%		6.77%
6	Operat'g Inc. Def'y (L4 - L2)	\$ 1,207,145		\$ 1,656,303	\$ 630,830	\$ 3,858	\$ 7,614		\$ 20,752	\$	\$ 663,054
7	Gross Rev. Factor (RLM-1, Pg 2)	1.6286		1.6286	1.6286	1.6286	1.6286		1.6286		1.6286
8	Incr. In Gross Rev. Req't (L7 X L6)	\$ 1,965,956		\$ 2,697,456	\$ 1,027,392	\$ 6,283	\$ 12,400		\$ 33,775	\$	\$ 1,079,850
9	Adjusted Test Year Revenue	\$ 3,535,680		\$ 3,535,680	\$ 3,535,680	\$ 0	\$ 0		\$ 0	\$	\$ 3,535,680
10	Proposed Annual Rev. (L8 + L9)	\$ 5,494,492		\$ 6,233,136	\$ 4,563,072	\$ 6,283	\$ 12,400		\$ 33,775	\$	\$ 4,615,530
11	Req'd % Increase In Rev. (L8 / L9)	55.60%		76.29%	29.06%	0.18%	0.35%		0.95%		30.54%
12	Rate Of Return On Common Eq'ty	11.50%		11.50%	9.11%	0.00%	0.00%		0.50%		9.61%

References:

- Column (A): Company Schedules A-1 and C-1
- Column (B): RUCO Schedule RLM-2
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**SURREBUTTAL**  
**EXPLANATION OF OPERATING INCOME ADJUSTMENT NO. 4**  
**PROJECTED SALARIES AND WAGES**

LINE NO.	AZ-AM BUSINESS UNIT	(A) GROSS PAYROLL	(B) CAPITAL'D PAYROLL	(C) NET PAYROLL	(D) EMP. COUNT	(E) PAYROLL TAX
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6	Agua Fria 2361	875,892	236,491	639,401	7	50,629
7	Anthem Water 2381 & 2383	460,581	124,357	336,224	12	28,661
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12	Company Rebuttal	4,270,021	985,673	3,268,803		
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	COMPANY AS FILED	RUCO SURREBUTTAL	REVISED ADJUSTMENT	SURREBUTTAL DIFFERENCE
17	\$ 445,070	\$ 317,097	\$ (127,973)	\$ (11,518)
18	36,253	26,463	(9,790)	(881)
19	<u>\$ 481,323</u>	<u>\$ 343,560</u>	<u>\$ (137,763)</u>	<u>\$ (12,399)</u>

	COMPANY AS FILED	RUCO SURREBUTTAL	REVISED ADJUSTMENT	SURREBUTTAL DIFFERENCE
20	\$ 734,448	\$ 628,619	\$ (105,829)	\$ (39,661)
21	62,065	53,969	(8,096)	(33,403)
22	<u>\$ 796,513</u>	<u>\$ 682,588</u>	<u>\$ (113,925)</u>	<u>\$ (73,064)</u>

	COMPANY AS FILED	RUCO SURREBUTTAL	REVISED ADJUSTMENT	SURREBUTTAL DIFFERENCE
23	\$ 88,549	\$ 63,129	\$ (25,420)	\$ (4,727)
24	7,754	5,809	(1,945)	(361)
25	<u>\$ 96,303</u>	<u>\$ 68,938</u>	<u>\$ (27,365)</u>	<u>\$ (5,088)</u>

	COMPANY AS FILED	RUCO SURREBUTTAL	REVISED ADJUSTMENT	SURREBUTTAL DIFFERENCE
26	\$ 59,664	\$ 55,739	\$ (3,925)	\$ (6,067)
27	4,809	4,509	(300)	(464)
28	<u>\$ 64,473</u>	<u>\$ 60,248</u>	<u>\$ (4,225)</u>	<u>\$ (6,531)</u>

References:

Columns (A) (D): Company Rebuttal Workpapers On AZ-AM 2002 Payroll  
Column (B): As Per Company Rebuttal Workpapers On AZ-AM 2002 Payroll - Capitalized Plant Is 27% Of Gross Plant  
Column (C): Column (A) - Column (B)  
Column (E): Column (C) X 7.65% (FICA) + \$245 X Column (D) (FUTA & SUTA)

**SURREBUTTAL**  
**RATE DESIGN - MONTHLY MINIMUM AND COMMODITY CHARGES**

LINE NO.	DESCRIPTION	(A) PRESENT RATES	(B) COMPANY PROPOSED	(C) RUCO PROPOSED	(D) PERCENTAGE INCREASE
<b>MONTHLY MINIMUM USAGE CHARGE:</b>					
1	Residential Units (WSR)	\$ 16.24	\$ 25.27	\$ 21.20	31%
2	Commercial Units (SSC)	23.09	35.93	30.15	31%
3	Commercial Larger User (WS6)	45.42	70.67	59.30	31%
4	Multi-Family Res. Units (AC WSRE)	16.24	25.27	21.20	31%
5	WS1 (Commercial, Additional Toilets)	5.30	8.25	6.92	31%
6	WS2 (Commercial Restaurant)	42.58	66.25	55.59	31%
7	WS3 (Commercial Laundromat)	9.93	15.45	12.96	31%
8	WS4 (Commercial, Per Wash Rack)	20.81	32.38	27.17	31%
<b>GALLONS IN MINIMUM</b>					
9	Commercial Larger User SS6	20,000	20,000	20,000	
<b>COMMODITY RATES (Per 1,000 Gallons Over Minimum)</b>					
10	Commercial Larger User SS6	\$ 0.98	\$ 1.52	\$ 1.28	31%
<b>ANNUAL FEE FOR INDUSTRIAL DISCHARGE SERVICE</b>					
For Those Customers Consuming An Amount Of Water Less Than Or Equal To 50,000 Gallons Per Month Through One Or More Water Meters To The Same Facility, Inclusive Of Meters Used For Irrigation.					
11		\$ 500.00	\$ 500.00	\$ 500.00	
For Those Customers Consuming An Amount Of Water Greater Than 50,000 Gallons Per Month Through One Or More Water Meters To The Same Facility, Inclusive Of Meters Used For Irrigation.					
12		\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	
Annual Fee For Industrial Discharge Service Charges Shall Be Non-Refundable And Shall Be Assessed In Advance Each January By The Company By Special Billing. For New Customers Receiving This Service, A Prorated Charge Shall Be Assessed.					

References:

Columns (A) (B): Company Schedule H-3, Page 2 Revised  
Column (C): Surrebuttal Testimony, RLM  
Column (D): Column (C) - Column (A) / Column (A) X 100

Arizona-American Water Company  
Docket No. SW-01303A-02-0867  
Test Year Ended December 31, 2001

Sun City West Wastewater District  
Surrebuttal Schedule RLM-19  
Page 1 of 1

**SURREBUTTAL  
TYPICAL BILL ANALYSIS  
WASTEWATER SERVICE TO RESIDENTIAL UNITS**

		(A)	(B)	(C)	(D)	(E)
COMPANY PROPOSED AS FILED						
LINE NO.	USAGE	GALLONS CONSUMED	PRESENT RATES	PROPOSED RATES	DOLLAR INCREASE	PERCENT INCREASE
1	Average	0	\$16.24	\$25.27	\$9.03	55.6%
RUCO SURREBUTTAL PROPOSED						
2	Average	0	\$16.24	\$ 21.20	\$4.96	30.6%
3	Average Number Of Customers:		14,316			

Arizona-American Water Company  
Docket No. W-01303A-02-0867  
Test Year Ended December 31, 2001

Tubac Water District

**SURREBUTTAL**  
**TABLE OF CONTENTS TO RLM SCHEDULES**

SCH. NO.	PAGE NO.	TITLE
RLM-1	1	REVENUE REQUIREMENT
RLM-10	1	EXPLANATION OF OPERATING INCOME ADJUSTMENT NO. 4 - PROJECTED SALARIES AND WAGES
RLM-17	1	RATE DESIGN - MONTHLY MINIMUM, COMMODITY AND SERVICE CHARGES
RLM-19	1	TYPICAL BILL ANALYSIS

**SURREBUTTAL  
REVENUE REQUIREMENT**

LINE NO.	DESCRIPTION	(A) COMPANY RCND	(B) ADJMT TO RESTATE TO ORIGINAL COST	(C) COMPANY ORIGINAL COST	(D) DIRECT RUCO ORIGINAL COST	(E) NO. 1	(F) SURREBUTTAL RUCO - OCRB ADJUSTMENTS		(H) NO. 4	(I) SURRE'L RUCO OCRB AS ADJUTED
							NO. 2	NO. 3		
1	Fair Value Rate Base	\$ 1,903,764	\$ (289,243)	\$ 1,614,521	\$ 1,172,012	\$ 1,397	\$ 0	\$ 0	\$ 0	\$ 1,173,409
2	Adjusted Operat'g Income (Loss)	\$ 14,583		\$ 14,583	\$ 44,735	\$ 9	\$ (5,164)		\$ (15)	\$ 39,565
3	Current Rate Of Return (L2 / L1)	0.77%		0.90%	3.82%					3.37%
4	Req. Operat'g Income (L5 X L1)	\$ 147,501		\$ 125,125	\$ 77,008	\$ 92	\$ 0		\$ 2,283	\$ 79,383
5	Req'd Rate Of Return On FVRB	7.75%		7.75%	6.57%				0.20%	6.77%
6	Operat'g Inc. Def'y (L4 - L2)	\$ 132,918		\$ 110,542	\$ 32,273	\$ 83	\$ 5,164		\$ 2,298	\$ 39,818
7	Gross Rev. Factor (RLM-1, Pg 2)	1.6286		1.6286	1.2646	1.2646	1.2646		1.2646	1.2646
8	Incr. In Gross Rev. Req't (L7 X L6)	\$ 216,475		\$ 180,029	\$ 40,812	\$ 105	\$ 6,530		\$ 2,906	\$ 50,353
9	Adjusted Test Year Revenue	\$ 254,486		\$ 254,486	\$ 254,486	\$ 0	\$ 0		\$ 0	\$ 254,486
10	Proposed Annual Rev. (L8 + L9)	\$ 469,847		\$ 434,515	\$ 295,298	\$ 105	\$ 6,530		\$ 2,906	\$ 304,839
11	Req'd % Increase In Rev. (L8 / L9)	85.06%		70.74%	16.04%	0.04%	2.56%		1.14%	19.79%
12	Rate Of Return On Common Eq'ty	11.50%		11.50%	9.11%	0.00%	0.00%		0.50%	9.61%

References:

- Column (A): Company Schedules A-1 and C-1
- Column (B): RUCO Schedule RLM-2
- Column (C): Recalculated After Adjusting To OCRB
- Column (D): RUCO Schedules RLM-3, RLM-6 And RLM-19
- Column (E): Adjustment No. 1 - Computation Error In Direct Plant Schedules - See Surrebuttal Testimony
- Column (F): Adjustment No. 2 - Computation Error In Direct Gross Salaries And Wages - See RUCO Surrebuttal Schedules RLM-10
- Column (G): Adjustment No. 3 - SUN CITY WATER DISTRICT ONLY Computation Error In Projected Corporate Overhead - See Surrebuttal Testimony
- Column (H): Adjustment No. 4 - RUCO Revised Cost Of Capital - See William Rigby's Surrebuttal Testimony
- Column (I): Sum Of Columns (D) Thru Column (H)



**SURREBUTTAL**  
**EXPLANATION OF OPERATING INCOME ADJUSTMENT NO. 4**  
**PROJECTED SALARIES AND WAGES**

LINE NO.	COMPANY	AZ-AM BUSINESS UNIT	(A) GROSS PAYROLL	(B) CAPITAL'D PAYROLL	(C) NET PAYROLL	(D) EMP. COUNT	(E) PAYROLL TAX
1	Sun City West Water	2364	\$ 377,644	\$ 101,964	\$ 275,680	6	\$ 22,560
2	Sun City West W/W	2365	434,380	117,283	317,097	9	26,463
3	Sun City Water	2362	861,122	232,503	628,619	24	53,969
4	Sun City Wastewater	2363	86,478	23,349	63,129	4	5,809
5	Tubac	2389	76,355	20,616	55,739	1	4,509
6	Agua Fria	2361	875,892	236,491	639,401	7	50,629
7	Anthem Water	2381 & 2383	460,581	124,357	336,224	12	28,661
8	Agua Fria, Anthem W/W	2382 & 2384	301,354	81,366	219,988	6	18,299
9	Mohave Water	2371	651,510	175,908	475,602	15	40,059
10	Havas Water	2373	144,850	39,110	105,741	3	8,824
11	TOTALS		\$ 4,270,166	\$ 1,152,945	\$ 3,117,221	87	\$ 259,782
12	Company Rebuttal		4,270,021	985,673	3,268,803		
13	Difference		\$ 145	\$ 167,272	\$ (151,582)		
				COMPANY AS FILED	RUCO SURREBUTTAL	REVISED ADJUSTMENT	SURREBUTTAL DIFFERENCE
14	Rebuttal Adjustment No. 1 Salaries And Wages			\$ 347,733	\$ 275,680	\$ (72,053)	\$ (26,061)
15	Rebuttal Adjustment No. 2 Payroll Tax			28,072	22,560	(5,512)	(1,994)
16	TOTAL			\$ 375,805	\$ 298,240	\$ (77,565)	\$ (28,055)
				COMPANY AS FILED	RUCO SURREBUTTAL	REVISED ADJUSTMENT	SURREBUTTAL DIFFERENCE
17	Rebuttal Adjustment No. 1 Salaries And Wages			\$ 445,070	\$ 317,097	\$ (127,973)	\$ (11,518)
18	Rebuttal Adjustment No. 2 Payroll Tax			36,253	26,463	(9,790)	(881)
19	TOTAL			\$ 481,323	\$ 343,560	\$ (137,763)	\$ (12,399)
				COMPANY AS FILED	RUCO SURREBUTTAL	REVISED ADJUSTMENT	SURREBUTTAL DIFFERENCE
20	Rebuttal Adjustment No. 1 Salaries And Wages			\$ 734,448	\$ 628,619	\$ (105,829)	\$ (39,661)
21	Rebuttal Adjustment No. 2 Payroll Tax			62,065	53,969	(8,096)	(33,403)
22	TOTAL			\$ 796,513	\$ 682,588	\$ (113,925)	\$ (73,064)
				COMPANY AS FILED	RUCO SURREBUTTAL	REVISED ADJUSTMENT	SURREBUTTAL DIFFERENCE
23	Rebuttal Adjustment No. 1 Salaries And Wages			\$ 88,549	\$ 63,129	\$ (25,420)	\$ (4,727)
24	Rebuttal Adjustment No. 2 Payroll Tax			7,754	5,809	(1,945)	(361)
25	TOTAL			\$ 96,303	\$ 68,938	\$ (27,365)	\$ (5,088)
				COMPANY AS FILED	RUCO SURREBUTTAL	REVISED ADJUSTMENT	SURREBUTTAL DIFFERENCE
26	Rebuttal Adjustment No. 1 Salaries And Wages			\$ 59,664	\$ 55,739	\$ (3,925)	\$ (6,067)
27	Rebuttal Adjustment No. 2 Payroll Tax			4,809	4,509	(300)	(464)
28	TOTAL			\$ 64,473	\$ 60,248	\$ (4,225)	\$ (6,531)

References:

Columns (A) (D): Company Rebuttal Workpapers On AZ-AM 2002 Payroll

Column (B): As Per Company Rebuttal Workpapers On AZ-AM 2002 Payroll - Capitalized Plant Is 27% Of Gross Plant

Column (C): Column (A) - Column (B)

Column (E): Column (C) X 7.65% (FICA) + \$245 X Column (D) (FUTA & SUTA)

Arizona-American Water Company  
Docket No. W-01303A-02-0908  
Test Year Ended December 31, 2001

Tubac Water District  
Surrebuttal Schedule RLM-17  
Page 1 of 1

**SURREBUTTAL  
RATE DESIGN - MONTHLY MINIMUM AND COMMODITY CHARGES**

LINE NO.	DESCRIPTION	(A) PRESENT RATES	(B) COMPANY PROPOSED	(C) RUCO PROPOSED	(D) PERCENTAGE INCREASE
<b>MONTHLY MINIMUM USAGE CHARGE:</b>					
1	5/8 X 3/4 - Inch	\$ 15.35	\$ 28.58	\$ 18.43	20%
2	3/4 - Inch	15.35	28.58	18.43	20%
3	1 - Inch	23.00	42.83	27.62	20%
4	1 1/2 - Inch	46.00	85.66	55.23	20%
5	2 - Inch	76.00	141.52	91.25	20%
6	3 - Inch	90.00	167.59	108.06	20%
7	4 - Inch	132.00	245.79	158.48	20%
8	6 - Inch	180.00	335.17	216.11	20%
9	8 - Inch	N/A	2,858.00	1,842.75	N/A

NO GALLONS INCLUDED OR PROPOSED IN THE MONTHLY MINIMUM USAGE CHARGE

**COMMODITY RATES - ALL METERS (Per 1,000 Gallons):**

10	Tier 1 (0 to 8,000 Gallons)	\$ 1.66	\$ 3.09	\$ 1.99	20%
11	Tier 2 (Above 8,001 Gallons)	2.04	3.79	2.45	20%

In Addition, Company Shall Collect Groundwater Saving Fee Per Decision No. 62203  
Ground Waterdrawal Fees Shall Be Collected As An Assessment,  
And Is Subject To Annual Revisions As Required Due To Changes  
In Rates Charged By The Arizona Department Of Water Resources (ADWR).  
Includes An Allowance Of 10% Lost And Unaccounted For Water.

References:  
Columns (A) (B): Company Schedule H-3, Page 3  
Column (C): Testimony, RLM

**SURREBUTTAL  
TYPICAL BILL ANALYSIS  
RESIDENTIAL WATER SERVICE TO 5/8 X 3/4 INCH METERS**

LINE NO.	USAGE	(A) COMPANY PROPOSED AS FILED GALLONS CONSUMED	(B) PRESENT RATES	(C) PROPOSED RATES	(D) DOLLAR INCREASE	(E) PERCENT INCREASE
1	Average	13,177	\$39.19	\$72.92	\$33.73	86.06%
2	Median	7,535	\$27.86	\$51.86	\$24.00	86.17%

**RUCO SURREBUTTAL PROPOSED**

3	Average	13,177	\$39.19	\$47.05	\$7.86	20.05%
4	Median	7,535	\$27.86	\$33.44	\$5.59	20.05%
5	Average Number Of Customers:		401			

**PRESENT AND PROPOSED RATES (WITHOUT TAXES)**

	Gallons Consumed	Present Rates	Company		RUCO	
			Prop'd Rates	% Increase	Prop'd Rates	% Increase
6	0	\$15.35	\$28.58	86.2%	\$18.43	20.0%
7	1,000	17.01	31.67	86.2%	20.42	20.0%
8	2,000	18.67	34.76	86.2%	22.41	20.0%
9	3,000	20.33	37.85	86.2%	24.41	20.0%
10	4,000	21.99	40.94	86.2%	26.40	20.0%
11	5,000	23.65	44.03	86.2%	28.39	20.0%
12	6,000	25.31	47.12	86.2%	30.38	20.0%
13	7,000	26.97	50.21	86.2%	32.38	20.0%
14	8,000	28.63	53.30	86.2%	34.37	20.0%
15	9,000	30.67	57.09	86.1%	36.82	20.0%
16	10,000	32.71	60.88	86.1%	39.27	20.0%
17	15,000	42.91	79.83	86.0%	51.51	20.0%
18	20,000	53.11	98.78	86.0%	63.76	20.0%
19	25,000	63.31	117.73	86.0%	76.00	20.0%
20	50,000	114.31	212.48	85.9%	137.23	20.0%
21	75,000	165.31	307.23	85.9%	198.45	20.0%
22	100,000	216.31	401.98	85.8%	259.68	20.0%
23	125,000	267.31	496.73	85.8%	320.90	20.0%
24	150,000	318.31	591.48	85.8%	382.13	20.0%
25	175,000	369.31	686.23	85.8%	443.35	20.0%
26	200,000	420.31	780.98	85.8%	504.58	20.0%

**ARIZONA- AMERICAN WATER COMPANY, INC.**

**DOCKET NOS. WS-01303A-02-0867**

**WS-01303A-02-0868**

**W-01303A-02-0869**

**WS-01303A-02-0870**

**W-01303A-02-0908**

**SURREBUTTAL TESTIMONY**

**OF**

**WILLIAM A. RIGSBY**

**ON BEHALF OF**

**THE**

**RESIDENTIAL UTILITY CONSUMER OFFICE**

**OCTOBER 31, 2003**

1	<b>INTRODUCTION .....</b>	<b>1</b>
2	<b>SUMMARY OF ARIZONA-AMERICAN'S REBUTTAL TESTIMONY .....</b>	<b>2</b>
3	<b>COST OF DEBT .....</b>	<b>3</b>
4	<b>COST OF EQUITY CAPITAL .....</b>	<b>4</b>

5

1 **INTRODUCTION**

2 Q. Please state your name, occupation, and business address.

3 A. My name is William A. Rigsby. I am a Public Utilities Analyst V employed  
4 by the Residential Utility Consumer Office ("RUCO") located at 1110 W.  
5 Washington, Suite 220, Phoenix, Arizona 85007.

6  
7 Q. Please state the purpose of your surrebuttal testimony.

8 A. The purpose of my testimony is to respond to Arizona-American Water  
9 Company Inc.'s ("Arizona-American" or "Company") rebuttal testimony on  
10 RUCO's recommended rate of return on invested capital (which includes  
11 RUCO's recommended cost of debt and cost of common equity) for the  
12 Company's water and wastewater operations located in Maricopa,  
13 Mohave and Santa Cruz counties.

14  
15 Q. Have you filed any prior testimony in this case on behalf of RUCO?

16 A. Yes, on September 5, 2003, I filed direct testimony with the Arizona  
17 Corporation Commission ("ACC" or "Commission"). My direct testimony  
18 addressed the cost of capital issues that were raised in Arizona-  
19 American's application requesting a permanent rate increase  
20 ("Application") based on a test year ended December 31, 2001 ("Test  
21 Year").  
22  
23

1 Q. How is your surrebuttal testimony organized?

2 A. My surrebuttal testimony contains four parts: the introduction that I have  
3 just presented; a summary of Arizona-American's rebuttal testimony; a  
4 section on the cost of debt; and a section on the cost of equity capital.  
5

6 **SUMMARY OF ARIZONA-AMERICAN'S REBUTTAL TESTIMONY**

7 Q. Have you reviewed the rebuttal testimony of Company witnesses David P.  
8 Stephenson, Walter W. Meek and Dr. Thomas M. Zepp?

9 A. Yes. I have reviewed the rebuttal testimony, filed by the aforementioned  
10 Company witnesses on October 10, 2003, that addresses the cost of  
11 capital and reconstruction cost new less depreciation ("RCND") issues in  
12 this case.  
13

14 Q. Please summarize the Company's rebuttal testimony that addresses the  
15 cost of capital issues in this case.

16 A. Mr. Stephenson's rebuttal testimony on Arizona-American's cost of debt  
17 presents the Company's position on why the Commission should adopt his  
18 recalculated 4.86 percent weighted cost of debt.

19 Mr. Meek's rebuttal testimony addresses ACC Staff witness Joel M.  
20 Reiker's 9.70 percent recommended cost of equity capital and advocates  
21 the approach to security analysis that is being used by Smith Barney, a  
22 Wall Street brokerage house. He also supports the Company's RCND

1 rate base proposal that was discussed in both my direct testimony and in  
2 the direct testimony of RUCO witness Marylee Diaz-Cortez.

3 Dr. Zepp's rebuttal testimony takes issue with RUCO's recommended cost  
4 of equity capital and the methods that were used to derive my  
5 recommended 9.11 percent cost of common equity for Arizona-American.  
6 Dr. Zepp disagrees with my decision not to adjust my cost of common  
7 equity to reflect the level of debt in the Company's capital structure and  
8 also addresses the RCND issues associated with this case.  
9

10 **COST OF DEBT**

11 Q. Has the Company accepted RUCO's recommended cost of debt?

12 A. No. However, the difference between my recommended 4.87 percent cost  
13 of debt and Mr. Stephenson's recalculated 4.86 percent cost of debt is  
14 minimal.  
15

16 Q. Please explain how RUCO arrived at its recommended 4.87 percent  
17 weighted cost of debt as opposed to how the Company arrived at its  
18 recalculated 4.86 percent weighted cost of debt.

19 A. RUCO's 4.87 percent weighted cost of debt was based on information  
20 obtained through data requests and conversations with Mr. Stephenson  
21 just prior to the September 5, 2002 deadline for filing direct testimony. My  
22 4.87 percent cost of debt figure removed what appeared to be a double  
23 weighting error in the Company's Application. Mr. Stephenson's



1 recalculated weighted cost of debt excludes City of Tolleson bonds, and  
2 includes the following: Maricopa Industrial Revenue Development Bonds  
3 ("IRDB's") at their current price; the Company's current amount of short-  
4 term debt at current long-term costs; and all of the Company's debt  
5 instruments which includes payment in lieu of revenue agreements  
6 ("PILAR's").  
7

8 Q. Does RUCO accept the Company-proposed cost of debt presented in Mr.  
9 Stephenson's rebuttal testimony?

10 A. Yes. Given the fact that there is so little difference between RUCO's 4.87  
11 percent figure and Mr. Stephenson's recalculated 4.86 percent figure,  
12 RUCO is willing to accept the Company's 4.86 percent weighted cost of  
13 debt.  
14

#### 15 **COST OF EQUITY CAPITAL**

16 Q. What cost of common equity issues does Mr. Meek address in his rebuttal  
17 testimony?

18 A. Mr. Meek, the president of the Arizona Utility Investors Association  
19 ("AUIA") who describes himself as a "real world" witness as opposed to an  
20 expert witness, devotes the majority of his testimony to criticizing ACC  
21 staff witness Reiker over his use of the capital asset pricing model  
22 ("CAPM"). More to the point, Mr. Meek is highly critical of the beta  
23 component of the CAPM model, which is the cornerstone of CAPM theory.

1 Mr. Meek goes on to cite other factors that investors weigh in deciding  
2 whether or not to invest in a utility, including the consideration of returns of  
3 other utilities such as Southwest Gas Corporation. This argument  
4 amounts to nothing more than an endorsement of the comparable  
5 earnings method (which has been discredited for almost two decades).  
6 Mr. Meek also advocates the approach to security analysis that is being  
7 used by Smith Barney, a Wall Street brokerage house, and supports the  
8 Company's position regarding an RCND rate base.

9  
10 Q. Does Mr. Meek specifically address RUCO's recommended cost of capital  
11 in his rebuttal testimony?

12 A. No. However, he is critical of some of the same methods that I also used  
13 in deriving RUCO's recommended cost of equity. If the Commission is  
14 persuaded by Mr. Meek's arguments against what he characterizes as  
15 being a textbook theory approach to determining cost of common equity,  
16 then it should disregard the testimony of Company witness Zepp, since Dr.  
17 Zepp relies even more heavily on the same textbook theories criticized by  
18 Mr. Meek.

1 Q. What is the comparable earnings methodology that Mr. Meek appears to  
2 be advocating in his rebuttal testimony?

3 A. The comparable earnings methodology arrives at a return on common  
4 equity that is largely based on the authorized returns of other utilities.  
5 Company witness Kozoman probably described it best when he referred  
6 to it as "circular logic"<sup>1</sup> in a prior unrelated rate case proceeding.  
7

8 Q. What are the problems associated with a comparable earnings analysis?

9 A. In their work titled The Cost of Capital – Estimating the Rate of Return for  
10 Public Utilities<sup>2</sup>, authors A. Lawrence Kolbe, James A. Read, Jr. and  
11 George R. Hall ("Kolbe et al."), analyzed the five most commonly used  
12 methods for estimating the cost of common equity. Their evaluation of the  
13 comparable earnings method is as follows:

14 "There are serious problems with the Comparable Earnings  
15 method. Only by chance will conventional application of  
16 comparable earnings yield an estimate of the rate of return  
17 equal to the cost of capital. Furthermore, the difference  
18 between this estimate and the cost of capital is likely to be  
19 significant. The CE [comparable earnings] method scores  
20 quite poorly on most conceptual criteria and it is clearly the  
21 worst of the five methods examined in detail."  
22

23 Kolbe et al. go on to state:

24 "In fairness it should be noted that an expert may sometimes  
25 use the CE method as a rough guide to his or her judgment

---

<sup>1</sup> Rebuttal Testimony of Ronald L. Kozoman, Vail Water Company Docket No. W-01651A-97-0539 et al.

<sup>2</sup> A. Lawrence Kolbe and James A. Read Jr., The Cost of Capital – Estimating the Rate of Return for Public Utilities, The MIT Press: Cambridge, Massachusetts, 1984, pp. 91-92.

1 or experience or as a supplement to the results of other  
2 methods."

3  
4 Q. Have you used the comparable earnings method in the same manner that  
5 Kölbe et al. have recommended?

6 A. To a degree, yes. In this proceeding, I have made no secret of the fact  
7 that I looked at the historic and projected returns of my sample utilities in  
8 relation to their levels of debt and equity and weighed these returns with  
9 the estimates of independent analysts to arrive at my recommended cost  
10 of equity. Mr. Meek's testimony is part of a developing trend that I have  
11 noticed over the last year or so in which utilities and their consultants want  
12 to place more emphasis on comparable earnings over the results of equity  
13 valuation models. Based on the findings presented by Kolbe et al., there  
14 is no scientific or societal reason for an increased emphasis on  
15 comparable earnings at this point in time. A strong argument could be  
16 made that the only real reason for any increased emphasis in the  
17 comparable earnings method is the end result – a higher cost of equity,  
18 which equates to a higher rate of return.

19  
20 Q. What is your explanation for the developing trend that you just noted  
21 regarding comparable earnings analysis?

22 A. I believe this trend is attributable to the fact that prior authorized rates of  
23 return are higher than what is warranted in the low inflation and low

1 interest rate environment that we are currently operating in. Hence, the  
2 higher level rates of return that were set two to three years ago certainly  
3 would seem more attractive than what is merited at this point in time.  
4

5 Q. Please comment on Mr. Meek's opinion that a new rating system  
6 developed by Smith Barney analysts (to establish buy, hold or sell  
7 recommendations) exposes stock purchasers to a system that rates  
8 stocks on risk factors that are unique to each company.

9 A. I am somewhat perplexed at Mr. Meek's reliance on the advice of one  
10 particular Wall Street brokerage house. Smith Barney and other large  
11 brokerages were the subjects of a recent securities fraud case. I would  
12 not, as either an investor or a cost of capital analyst, rely on information  
13 provided by any one particular Wall Street investment banker. I say this  
14 despite the recent agreement made by Wall Street brokerage firms to  
15 separate their research departments from their investment banking  
16 departments. In April 2003, Smith Barney, a Wall Street brokerage house  
17 now owned by Citigroup, and a number of other investment firms agreed  
18 to pay \$1.4 billion as part of a settlement agreement with the Securities  
19 and Exchange Commission<sup>3</sup>. The well-publicized settlement stemmed  
20 from a securities fraud investigation into stock losses attributed to biased  
21 research. The investigation, which targeted ten of Wall Street's leading

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<sup>3</sup> "Wall Street pact seen spurring suits," John Schoen, MSNBC, April 28, 2003.

1 brokerage houses, alleged that investors were misled by the "buy"  
2 recommendations of analysts who were employed by the investment  
3 firms. According to a report from Bloomberg, Citigroup agreed to pay  
4 \$400 million (the largest portion of the settlement) as a result of  
5 telecommunication stock losses incurred by investors who relied on the  
6 "buy" recommendations of a Smith Barney analyst<sup>4</sup>. Mr. Meek seems to  
7 be enamored with the fact that under the new Smith Barney ranking  
8 system a "low" risk investment that merits a "buy" endorsement is one that  
9 has a rate of return between 10 and 15 percent. Again, this is all based  
10 on the judgment of Smith Barney analysts.

11  
12 Q. Please summarize the rebuttal testimony of Dr. Zepp.

13 A. Dr. Zepp addresses my decision not to make an adjustment to my cost of  
14 common equity to reflect the level of debt in my recommended capital  
15 structure for Arizona-American. Dr. Zepp also takes issue with, and  
16 restates, the results of both my discounted cash flow ("DCF") analysis and  
17 my CAPM analysis.

18  
19  

---

<sup>4</sup> "Citigroup, Morgan Stanley CEOs Risk SEC Penalties," Bloomberg, June 4, 2003.

1 Q. Please explain Dr. Zepp's position on your decision not to include an  
2 adjustment to your recommended cost of equity based on the level of debt  
3 in the Company's capital structure?

4 A. Dr. Zepp believes that I should make a 50 basis point adjustment, as ACC  
5 Staff witness Reiker has, to my recommended cost of equity based on the  
6 level of debt contained in the Company's capital structure.

7  
8 Q. Have you revised your recommended cost of common equity to reflect a  
9 50 basis point adjustment based on the level of debt in the Company's  
10 capital structure?

11 A. Yes. After reading the direct testimony of Mr. Reiker and the rebuttal  
12 testimony of Mr. Stephenson, I recognized that Arizona-American is more  
13 leveraged than my proxy group. Accordingly, I have reconsidered my  
14 decision not to make an upward adjustment to my original 9.11 percent  
15 cost of common equity. My revised 9.61 percent cost of common equity  
16 and the 4.86 percent cost of debt that I adopted earlier in my testimony  
17 produce a weighted average cost of capital of 6.77 percent.

18  
19 Q. How does your revised weighted cost of capital compare with the  
20 Company's revised weighted cost of capital?

21 A. My 6.77 percent revised weighted cost of capital, exhibited in Surrebuttal  
22 Schedule WAR-1, is 74 basis points lower than the Company's 7.51

1 percent revised weighted cost of capital (displayed in Exhibit 3 of Mr.  
2 Stephenson's rebuttal testimony).

3  
4 Q. Do you agree with Dr. Zepp's criticisms of your DCF methodology?

5 A. No. In particular, I strongly disagree with Dr. Zepp's mischaracterization  
6 of the method that I used in the calculation of "v" for the external growth  
7 rate estimate portion of the DCF's growth component ("g"). This  
8 calculation takes into consideration the fact that, while in theory a utility's  
9 stock price should move toward a market to book ratio of 1.0 if regulators  
10 authorize a rate of return that is equal to a utility's cost of capital, in reality  
11 a utility will continue to issue shares of stock that are priced above book  
12 value.

13  
14 Q. Do you agree with Dr. Zepp's restatement of the results of your DCF  
15 analysis?

16 A. No, I do not. Dr. Zepp has restated g in my DCF analysis, which is the  
17 sum of a utility's internal, or sustainable growth rate ("br"), and the external  
18 growth rate estimate ("sv"). As I stated in my direct testimony, my  
19 estimate of g is higher than the projections presented by Zacks Investment  
20 Research, Inc.<sup>5</sup> and are more optimistic when compared with the  
21 projections of independent analysts at Value Line Investment Survey.

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<sup>5</sup> Zacks Investment Research was formed in 1978 to compile, analyze, and distribute investment research to both institutional and individual investors. Zack's presently compiles investment data that is obtained through its relationships with over 250 different brokerage firms.



1 This comparison was presented in Schedule WAR-7 of my direct  
2 testimony. The numbers of independent analysts exhibited in schedule  
3 WAR-7 speak for themselves and are a far better check on my estimate of  
4 g than the restatement that Dr. Zepp presents in his rebuttal testimony.

5  
6 Q. Do you agree with Dr. Zepp's restatement of your CAPM analysis?

7 A. No, I do not. First, my CAPM analysis was preformed as a check on my  
8 DCF result. Further, I do not intend to engage Dr. Zepp in what will  
9 ultimately become a meaningless esoteric argument that debates the  
10 merits of the Sharpe-Lintner CAPM model over the merits of the zero-beta  
11 CAPM model. My analysis used the closest possible analog to a risk-free  
12 asset, an average of the "real world" 91-day Treasury bill ("T-Bill") rate<sup>6</sup>  
13 and the 91-day T-Bill futures rate that appeared in the August 1, 2003  
14 issue of The Wall Street Journal ("WSJ"). This resulted in a risk-free ( $r_f$ )  
15 rate of return of 0.90 percent, which produced an expected return of 8.06  
16 percent. At the other extreme, Dr. Zepp has chosen to use what he  
17 considers to be an appropriate proxy for the risk-free asset which is Blue  
18 Chip Financial Forecast's higher 5.60 percent estimate of long-term  
19 treasury rates (an estimate that is 51 basis points higher than the current  
20 yield of 5.09 percent on a 30-year zero coupon treasury instrument as of

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<sup>6</sup> A six-week average was computed for the current rate using 91-day T-Bill quotes listed in Value Line's Selection and Opinion newsletter from June 27, 2003 to August 1, 2003.

1       October 2, 2003)<sup>7</sup>. This is based on Dr. Zepp's faith in the zero-beta  
2       version of CAPM. Dr. Zepp's restatement of my CAPM analysis produces  
3       an expected return of 9.80 percent. For the sake of argument, I will  
4       substitute the current 2.87 percent 5-year intermediate-term Treasury yield  
5       into Dr. Zepp's zero-beta CAPM model<sup>8</sup>. This produces an expected  
6       return of 8.75 percent or 86 basis points lower than the 9.61 percent  
7       revised cost of common equity that I am recommending and an expected  
8       return of 9.25 percent that is 36 basis points lower when a 50 basis point  
9       adjustment for additional financial risk is made. I believe that this is a  
10      reasonable check on my revised recommended 9.61 percent cost of  
11      equity.

12  
13   Q.   Please comment on Dr. Zepp's criticism of the use of CAPM to set rates in  
14       utility cases.

15   A.   Dr. Zepp's criticism is nothing less than disingenuous. In the fall of 1978,  
16       Dr. Zepp, then working as a senior economist for the Oregon Public Utility  
17       Commission, co-authored a paper that defended the use of CAPM in rate  
18       case proceedings<sup>9</sup>. In his article, which was written in response to a prior

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<sup>7</sup> The current 5.09 percent yield on the 30-year zero coupon Treasury instrument has dropped by 51 basis points since July 31, 2003.

<sup>8</sup> Some analysts argue that the intermediate-term rate is a better holding period yield for utilities since it more closely resembles the time frame that utilities apply for rate relief. Dr. Zepp's use of the long-term rate would assume that Arizona-American applies for rate relief every 30 years.

<sup>9</sup> Dennis E. Peseau and Thomas M. Zepp, "On the Use of the CAPM in Public Utility Rate Cases: Comment," Financial Management (Autumn, 1978), pp. 52-56.

1 article that was critical of CAPM<sup>10</sup>, Dr. Zepp admitted that (during the  
2 1970's) the dramatic increase in inflation had increased the risk-free rate  
3 of interest on U.S. Treasury instruments and therefore the cost of capital  
4 for utilities. Now that we find ourselves in a period marked by low rates of  
5 inflation and correspondingly low rates of interest, which would dictate a  
6 lower cost of capital for utilities, Dr. Zepp can't seem to find anything  
7 positive to say about CAPM.

8  
9 Q. Have any of the arguments advanced by the Company's witnesses in their  
10 rebuttal testimony persuaded you to make any further increases in your  
11 revised 9.61 percent cost of common equity?

12 A. No.

13  
14 Q. Please comment on Mr. Meek's and Dr. Zepp's rebuttal testimony on the  
15 RCND issues associated with this case.

16 A. I see this argument as nothing more than a means to achieve higher  
17 levels of operating income, by inflating rate base value, during a period of  
18 time in which lower authorized rates of return are merited (i.e. the low  
19 inflation and low interest rate environment that I discussed earlier). Not  
20 content with the Commission's practice of applying the authorized rate of  
21 return to the original cost of a utility's rate base (which produces a level of

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<sup>10</sup> Eugene F. Brigham and Roy L. Crum, "On the Use of the CAPM in Public Utility Rate Cases," Financial Management (Summer, 1977), pp. 7-15.

1 operating income that is based on the amount of actual dollars invested),  
2 the Company is attempting to inflate the values of each individual system's  
3 rate base in order to mitigate the effects of a lower authorized rate of  
4 return that is warranted in the current low inflation environment.

5  
6 Q. Are there any aspects of the RCND position presented by Dr. Zepp or Mr.  
7 Meek in their rebuttal testimony that you agree with?

8 A. None. As I stated in my direct testimony, the RCND position being  
9 advanced by the Company's witnesses and Mr. Meek in this case should  
10 be given no weight at all by the Commission. I also want to reiterate that  
11 this is simply an attempt for Arizona-American, or any other utility in this  
12 state that wants to plead the same argument, to earn more on restated or  
13 inflated rate base values. In short, it would lead to a situation in which  
14 Arizona ratepayers would have to pay higher rates for the same assets  
15 only because the value of the assets have been restated to reflect current  
16 costs.

17  
18 Q. How do you respond to Dr. Zepp's remark that your position on the RCND  
19 matter ignores cost of service?

20 A. It is not accurate and I am baffled as to why Dr. Zepp would even make  
21 such a statement. It is clear, from the direct testimony of RUCO's  
22 witnesses, that RUCO's primary reason for intervening in this proceeding  
23 was to perform an analysis on Arizona-American's cost of service in order

1 to determine if the Company's request for additional revenues is justified.

2 Apparently, Dr. Zepp has missed this obvious aspect of our testimony

3 because RUCO has certainly not ignored cost of service in this case.

4  
5 Q. Does your silence on any of the issues or positions addressed in the  
6 rebuttal testimony of the Company's witnesses constitute acceptance?

7 A. No, it does not.

8  
9 Q. Does this conclude your surrebuttal testimony on Arizona-American's  
10 Eastern Group systems?

11 A. Yes, it does.



ARIZONA-AMERICAN WATER COMPANY  
DOCKET NO. W-01303A-02-0867 ET AL.  
TABLE OF CONTENTS TO SURREBUTTAL SCHEDULES WAR

SCHEDULE #

WAR - 1

COST OF CAPITAL SUMMARY

ARIZONA-AMERICAN WATER COMPANY  
TEST YEAR ENDED DECEMBER 31, 2001  
COST OF CAPITAL SUMMARY

DOCKET NO. W-01303A-02-0867 ET AL.  
SURREBUTTAL SCHEDULE WAR - 1

LINE NO.	DESCRIPTION	(A) CAPITALIZATION PER COMPANY	(B) RUCO ADJUSTMENTS	(C) RUCO ADJUSTED CAPITALIZATION	(D) CAPITAL RATIO	(E) COST	(F) WEIGHTED COST
1	LONG-TERM DEBT	\$ 165,583,119	\$ -	\$ 165,583,119	59.89%	4.86%	2.91%
2	COMMON EQUITY	110,888,158	-	110,888,158	40.11%	9.61%	3.85%
3	TOTAL CAPITALIZATION	\$ 276,471,277	\$ -	\$ 276,471,277	100.00%		

4 COST OF CAPITAL

6.77%

REFERENCES:

COLUMN (A): ACC STAFF D.R. NO. JMR 8-3 AND JMR 8-4  
COLUMN (B): DIRECT TESTIMONY, WAR  
COLUMN (C): COLUMN (A) + COLUMN (B)  
COLUMN (D): COLUMN (C) ÷ COLUMN (C), LINE 5  
COLUMN (E): SURREBUTTAL TESTIMONY, WAR  
COLUMN (F): COLUMN (D) x COLUMN (E)